THE

Journal of the American Medical Association.

EDITED FOR THE ASSOCIATION BY N. S. DAVIS.

PUBLISHED WEEKLY.

Vol. IX. CHICAGO, OCTOBER 15, 1887. No. 16.

ORIGINAL ARTICLES.

ABSTRACT OF A PRELIMINARY REPORT OF EXPERIMENTAL RESEARCHES CONCERNING THE INFECTIOUS NATURE OF TRAUMATIC TETANUS.

Read in the Section of Pathology of the Ninth International Medical Congress, September 6, 1887.

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The author reported in detail a long series of experiments which are still in progress, and announced the results already obtained. Upwards of fifty inoculations have already been made. Two methods of inoculation have been employed—intra cranial inoculations after the method of Pasteur in the case of rabies, and subcutaneous or inter-muscular injections by means of hypodermic syringes. The inoculations and injections were made with aseptic precautions, and with sterilized instruments. In none of the experiments was there any sign of accidental infection, such as suppuration, etc. The material used for inoculation was in general obtained from the medulla or the spinal cord, and by culture in neutral or slightly alkaline flesh-glycerine-agar as recommended by Roux for the culture of tubercle bacilli. The tetanus material was taken, under aseptic precautions, from a horse and a mule dead of traumatic tetanus in the Veterinary Department of the University of Pennsylvania, the brain, medulla and cord being removed one and three hours respectively post mortem and immediately kept on ice until used. The inoculation material was in general prepared in the following manner: A small piece of the medulla or cord was thoroughly rubbed up in sterilized distilled water; after the solid particles were allowed for a few minutes to subside to the bottom of the vessel, the opalescent emulsion thus obtained was drawn off by means of sterilized pipettes, and placed in small sterilized vials until used, never having been thus kept longer than three hours before inoculation. Eight control experiments were made, and none of these rabbits became ill. The author concludes his paper as follows:

Résumé of results:

First Series.—Eight rabbits were inoculated sub dura cerebri from the medulla of a horse dead of tetanus, between August 1 and 18 inclusive. The rabbit inoculated directly from this horse showed the first symptoms of tetanus within 15 hours and died of well-marked tetanus within 48 hours after inoculation. Both the period of incubation and that of death became markedly shortened in continuing the inoculations from rabbit to rabbit.

Second Series.—Four rabbits were inoculated sub dura cerebri from the same medulla of horse. The rabbit inoculated directly from the horse showed the first symptoms of tetanus within 20 hours, and died within 48 hours after inoculation. Continuing the inoculation from rabbit to rabbit, the period of incubation and of death became markedly shortened.

Third Series.—Four rabbits were inoculated sub dura cerebri from the same medulla of horse after it had been kept on ice a day longer. The rabbit inoculated directly from the horse showed the first symptoms of tetanus within 24 hours and died within 48 hours after inoculation. Continuing the inoculations from rabbit to rabbit, the period of incubation and of death became markedly shortened.

Fourth Series.—Three rabbits were inoculated sub dura cerebri from the medulla of a mule dead of tetanus, with the same results as in the preceding series.

Fifth Series.—Seven rabbits were inoculated under the skin and into the muscular tissue of the back, from the medulla of the horse above mentioned. One died within 18 hours and another died within 10 days, but neither of them showed any signs of tetanus. A rabbit inoculated sub dura cerebri from the medulla of the latter on August 15, is still living and well on September 4, date of the last observation.

Sixth Series.—A rabbit, which had been inoculated under the skin directly from the horse on August 1 was 8 days afterward inoculated sub dura cerebri from the medulla of the last rabbit of the third series. It became sick and died promptly of tetanus within the shortened period; a rabbit inoculated sub dura cerebri from its medulla, showed signs of tetanus within 20 hours, but did not die until 5 days after inoculation.

Seventh Series.—Six rabbits were inoculated sub-dura cerebri from emulsions of spinal cords of rabbits, which had died of tetanus within the shortened period above mentioned. These cords had been treated in a manner similar to that employed by Pasteur for the attenuation of the virus of hydrophobia, during periods varying from 3 to 15 days. Five of them died of marked tetanus, the symptoms appearing and death occurring within periods longer than those of the corresponding rabbits from which the

medulla had been taken, and usually proportional to the length of time the cord had been drying. One of the six showed doubtful symptoms, but nevertheless very promptly died.

Eighth Series.—A rabbit was inoculated sub dura cerebri from the medulla of a rabbit which had died after inoculation from the cord which had been 15 days drying. It showed the first signs of tetanus in 40 hours and it died of tetanus 7 days after inoculation. A rabbit was inoculated sub dura cerebri from the cord which had been drying 14 days, and it died of tetanus in 20 hours. A rabbit and a cow were inoculated sub dura cerebri from its medulla. The former quickly died of marked tetanus. The latter died within 2 days without marked symptoms, and from the autopsy it seemed probable that injury to the brain had been the cause of death (there had been great difficulty in performing the operation of inoculation). A young rabbit inoculated sub dura cerebri from this cow's medulla died within 10 hours, but showed no signs of tetanus, and another rabbit inoculated sub dura cerebri from the medulla of this rabbit August 27, is still living and quite well September 4, never having shown any signs of illness.

Ninth Series.—Three rabbits were inoculated sub-dura cerebri September 1, from spinal cords of tetanus which had been drying respectively 23, 27 and 28 days (these cords were the same as those which had been drying longest, mentioned in the preceding seventh series.) The rabbits inoculated from the 23 and 28 day cords showed no signs of illness up to the time of the last observation, September 4. The one inoculated with the 27 day cord for the first time showed stiff jaws and difficulty in eating on the afternoon of September 4.

Tenth Series.—Three rabbits which had been inoculated under the skin on August 18, and had remained perfectly well, were inoculated sub dura cerebri September 1, from the same cords mentioned in the ninth series. The rabbit inoculated with the 23 day cord was found dead the next day, but it showed no signs of tetanus either externally or at the autopsy. That of the 28 day cord showed stiff jaws and would not eat for the first time on the afternoon of September 4. That of the 27 day cord showed no signs of illness up to the last observation, September 4.

Eleventh Series.—Three rabbits were inoculated sub dura cerebri, August 31, from cultures started from the horse's brain August 1, and renewed once, viz., on August 20. One of them has remained quite well up to the last observation, September 4. One remained quite well until September 2, afternoon, when it showed intermittent trismus and indisposition to eat. This condition continued up to date of last observation, September 4. One showed slight signs of tetanus for the first time September 3, and had them also up to date of last observation, September 4.

Twelfth Series.—A trial attempt was kindly made for me by Dr. L. Wolf, Demonstrator of Medical Chemistry in the Jefferson Medical College, to isolate a ptomaine from the brain, medulla and cord of the mule and cow above mentioned. The Stass-Otto method was more or less closely followed.

The product obtained from the mule was injected under the skin of the back of two rabbits. They became very ill within 20 minutes, being slightly paralyzed and exceedingly restless, frequently getting down flat on the belly and up again and jerking the hind legs up, but they showed no marked convulsive movement or trismus. They entirely recovered within 6 hours.

The product obtained from the cow produced but little and only very transient and indefinite effects.

Note.—Several autopsies of the tetanic animals were made, and they invariably showed intense congestion of the lungs, trachea and kidneys. Sometimes there was congestion, oftentimes none at all, of the central cerebro-spinal nervous system. The mucous membrane of the stomach was apparently normal.

Conclusions drawn from the author's personal researches:

1. Traumatic tetanus of the horse and mule is, at least sometimes if not always, an infectious disease, transmitable to other animals and therefore possibly also to man; and during the progress of this disease a virus is elaborated and multiplied which is capable of producing the same infectious disease in some other animals when placed beneath the dura mater of the cerebrum.

2. This virus is contained in the medulla and spinal marrow of the animal suffering with the disease. It is like the virus of hydrophobia, capable of being strengthened in virulency by inoculation sub dura cerebri from rabbit to rabbit, and, like the virus of hydrophobia, is capable of attenuation by exposure for a sufficient time to the action of dry air at a temperature of Summer heat and, still again like the rabic virus, its effects are far more intense when the virus is inserted beneath the dura mater cerebri than when injected beneath the skin or between the muscles of the back.

3. The author reserves his conclusion concerning a prophylactic effect of inoculation of the attenuated virus, until the completion of experiments which are at present in progress.

Conclusions drawn from the author's experience which correlated with those of Nicolayer, Carle and Ratone, Rosenbach, Ferrari, Flügge, Hochsinger, et al.:

Traumatic tetanus of the lower animals and of men, at least sometimes, possibly always, is a specific infectious disease due to the action of a specific infectious virus which exists in the tissues at the seat of infection, in the blood and in the central cerebro-spinal nervous system.

In view of the experimental evidence which we possess at present and of numerous unassailable observations of many surgeons and veterinarians, there seems to be ample warrant for the admission that not infrequently tetanus in man is acquired directly and indirectly from some of the domestic animals which surround him, notably the horse.

INFANT FEEDING, ESPECIALLY WITH REFERENCE TO SUBJECTS WITH INFANTILE ECZEMA.

Read in the Section on Diseases of Children, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

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In the following simple and practical paper I do not intend or expect to present any very new or startling points in regard to the subject under consideration, nor have I any special food to advocate, and not even any single fixed method of feeding to propose or defend. I confess myself to be still a searcher after the best nourishment for, or rather after the best method of nourishing, the growing child, and especially one afflicted with infantile eczema. I have studied the subject many years, in hundreds or even thousands of cases, but believe that much may yet be learned, and that we by no means appreciate the greatness of the subject sufficiently, and feel certain that the majority of practitioners do not give it the attention it deserves; while I am perfectly sure that the laity are by no means aware of the importance of proper feeding, nor rightly acquainted with the principles involved. Certain am I, from experience, that the right principles are often most egregiously violated, even by those of more than ordinary intelligence, while among the poor the ignorance and neglect of the matter is often appalling.

The present paper grew out of a discussion bearing upon "Infant Feeding" in the Children's Section of this Association at its meeting at New Orleans, two years ago, when, by vote of the Section, the writer was asked to prepare and present a paper on the subject.

In attempting to fulfil this request I shall not tax your time and patience with any scientific study of the processes of digestion, nor shall I attempt any discussion of the various foods which are more or less favorably known; neither shall I enter the literature of the subject. The object of the paper is rather to introduce the topic for discussion, and to present the practical aspect of the case as it has developed itself in my observation clinically.

If we look in the text-books, either on Diseases of the Skin or on Diseases of Children, we find but little reference to the matter of diet in children with eczema, and only the most general directions given. Indeed, one of the best writers on Diseases of Children, Eustace Smith, says: "Too much importance, however, need not be attached to the subject of diet in the treatment of eczema." Now, while all agree that *too* much importance must not be attached to the element of diet, in the management of infantile eczema, experience has shown me most conclusively that in by far the larger share of cases far *too little* consideration is given to the subject, and that judicious directions in regard to the matter have not only aided greatly in curing a present attack, but have also sufficed to prevent its recurrence.

Much that will be said in connection with this subject is undoubtedly well-known to my hearers; indeed, much of it is no doubt self-evident to an intelligent observer; but I feel it necessary to treat the subject fully and plainly, because, however intelligent parents and nurses may be in other matters, it seems impossible for them, ofttimes, to exercise the slightest common sense or judgment when it comes to the matter of what shall enter the infant's mouth. Much that will be said in regard to those affected with eczema applies equally well to infants with other diseases, or, indeed, to those in supposed health, but is none the less necessary and important in the present connection.

I find that it is almost useless to simply direct the attendants on infants that the diet shall be plain and nutritious, or to say that the diet must be restricted, or that the infant requires more nourishing food. In the majority of cases this really means nothing, either on account of the ignorance or carelessness of the mother or nurse; often they may desire most earnestly to aid the physician, but, having no knowledge of the physiological processes of digestion, or of the relative value of foods, or indeed, of the end to be accomplished, and being generally guided by the advice of the persons with whom they come in contact, nurses and others, it often results that they are about as far from right as it is possible to be, unless particularly instructed by the medical attendant.

In dealing with a case, therefore, it is necessary to give both negative and positive instructions, to define clearly both what and how the child shall *not* eat and drink, and how the feeding shall be carried on—in many cases the former is even more important than the latter.

I do not wish to offend my audience by the very simple and homely matters presented, but I have seen, both among the poor and even among those in the higher walks of life, such gross errors in regard to either what was given to children or what they were allowed to have, that I cannot forbear mentioning some of the articles in this connection. I have seen even very young infants with candy, even of the worst kinds, cakes of all varieties, cheese, apples, oranges, bananas and other fruits. Recently a babe 6 months old, covered with eczema, was brought to me, biting lustily on and having eaten half of an orange, devouring the skin and all. Once I found a pickle in an infant's hand, while it is most common to see crackers, even of the most indigestible varieties, given to infants, "just to keep them still," as the mother will say. Careful inquiry will elicit the fact in a considerable proportion of cases of infantile eczema, that the little patients get more or less tea and coffee, the attendant often saying that the infant is exceedingly fond of tea, while occasionally have I found that they were also given beer.

It is not at all uncommon, in going carefully over the history of infants with eczema, to find that the patient is accustomed, even during the first year of its life, often when but a few months old, to take some of the food of adults, eating, as the mother will say, a taste of everything on the table; and when closely questioned it will sometimes be found that this may include even pies, and the most indigestible articles. So commonly have I found this to be the case that I now always investigate the matter, and

frequently I have refused to treat the patient unless a promise is given that the child shall not come into the room while the food of the family is on the table.

While these gross errors in infant feeding are, of course, much more common among the poorer and more ignorant classes seen in dispensaries and hospitals, they also occur in the better classes, even in those where it would be least expected, as I have observed time and again. And even at the risk of being thought unnecessarily minute and perhaps commonplace in my treatment of the subject, I must emphasize the fact that, for the thoroughly successful management of infants with eczema, the diet must be most carefully investigated and watched, so that the physician shall be sure that the little patient takes only the articles directed.

It would hardly seem necessary to mention such a matter as regularity of feeding. But unless this is attended to errors may occur, and I have frequently seen infants where too frequent nursing seemed to be an element in keeping up the digestive disorder which was at the bottom of the eczema; the child is too often given the breast each time it cries on account of the itching of the eruption, and thus the disease aids in perpetuating itself. I have also often seen bread, if not a more harmful article, given for the same purpose. Efficient local treatment which allays the irritation may, therefore, have more than a purely local action, when it allows the infant to sleep without the constant application to the breast.

Having now made certain that the infant will receive nothing but the nourishment intended, it is necessary for the physician to give particular and specific directions in regard to this latter, and often to inquire most carefully into the matter, in order that there may be a perfect understanding in regard to every detail of nourishment.

Even when the infant is nursing there may often be some necessity of care and attention. As already mentioned, the breast should not be given too often, nor too seldom, nor at irregular intervals. The child may also undoubtedly be affected by the condition of the mother, and by what she eats and drinks. Often a case of eczema will be benefited by improving the health of the mother in many respects, for frequently eczema is dependent upon poor nourment, and the anæmic, dyspeptic, constipated mother cannot furnish perfect milk. I almost always give a bitter tonic with acetate of potassium to a nursing mother with an eczematous child, and am very careful in regard to the condition of the mother's bowels. Other mothers need iron, hypophosphites, malt, or cod-liver oil, while very frequently it is necessary to give careful attention to the diet of the mother.

Many nursing mothers are in the habit of taking large quantities of tea; others take beer, or chocolate, with the idea of aiding in the secretion of milk. All of these I believe to be more or less injurious to the nursing infant with eczema, and are forbidden. If properly taken, milk affords the best means from which the human milk can be secreted, and there are few who cannot take it with benefit, both to themselves and their nursing infants, if due care be exercised in its administration.

The first point which I emphasize is that the milk should never be taken at the meals, nor in connection with any other substance whatever, nor when the stomach contains any food, or remains of food. It is best taken pure and alone, as a drink, and preferably at the temperature of the body, never iced, when the stomach is empty, presumably about three hours after a light meal, and four hours or more after a more hearty meal. Thus, my constant direction is that nursing mothers should take milk, say about an hour before each meal, and then also during the night if awake, beginning not earlier than about 11 o'clock. A quart or two of milk can thus be taken with comparative ease, and its effects appear in the mother and child often in a very striking manner. If the milk seems to sour at all on the stomach I frequently have a few drops of liquor potassæ, 10 or 15, or a little bicarbonate of soda, added to each tumblerful.

The idea of giving the milk thus on an empty stomach is that it may enter the system, if possible, without passing through the process of curdling and digesting in the stomach. When given during the interval and after stomach digestion is finished, the supposition is that the alkaline milk, received into the stomach when this is slightly alkaline, as it is at this time, enters the absorbents at once and mingles with the blood current, as we know it can when injected into a vein. It is to be remembered that under the microscope milk globules and those of chyle are hardly distinguishable, and as the blood current is alkaline there is no reason why milk taken in this manner, and entering the lacteals undigested, may not mingle at once with the mass of blood, as does the chyle and as does also the milk when administered in transfusion. The addition of an alkali renders this more easy and certain, and when the stomach and mouth seem acid, a little alkali taken in water, quarter of an hour before the milk, serves to counteract this acidity, and prevents the milk from becoming curdled by any remaining acid.

The reason of abstaining from food in connection with milk is found in the fact that the gastric juice necessary for the digestion of even the smallest amount of substance other than the milk would curdle the milk, thus requiring a complete digestion of the entire quantity.

The proof of the theory that there is some special mode in which milk acts when taken thus alone on an empty stomach, and with the assistance of an alkali when necessary, is found in the clinical experience which has attended a large number of cases in whom this plan has been practiced. Many patients who before had been unable to take milk, because it excited in them the so-called "bilious" condition, find that they can take it not only with impunity in this way, but with the greatest benefit. Another proof is found in the feelings experienced shortly after thus drinking milk, which is often described as one of not only immediate refreshment, but even of exhilaration, which has been likened to that of taking liquor, and many patients, both nursing mothers and others, have repeatedly expressed to me their satisfaction at the success of what seemed to them at first a doubtful experiment.

I trust this somewhat lengthy digression will be pardoned, as in reality it has a very decided bearing upon the subject under discussion; because, I believe that by this means of taking milk many infants can be well nourished on the breast alone who otherwise would either be poorly nourished by it, or would have other food given as supplemental, which would certainly not be as efficient as a full supply of healthy breast milk, such as has been provided by nature for the purpose.

In the case of small infants with eczema where breast milk is not obtainable, there is a wide field for discussion in regard to the best mode of nourishment, which can hardly be touched upon within the limits of this paper. All are more or less familiar with the various artificial foods which have been presented to the profession, and which have each received their advocates, and undoubtedly have each their merits. Among the most prominent of these may be mentioned Mellin's, Horlick's, Nestlé's, Ridge's, Carnrick's, Savory and Moore's, and what is known as lactated food; each of these and others are claimed by their proprietors as offering the most perfect solution of this most difficult problem, as to what is the best nourishment for the infant deprived of its normal supply—and yet the experience of all must have answered that as yet no perfect substitute has been found, and that indeed there probably never can be found any substance other than mother's milk which will suit every case.

Undoubtedly the substance most like human milk is that from animals, and I have to declare my decided preference to this Nature's substitute above all those which have been artificially prepared with a view to represent, or to efficiently take the place of, milk from the human breast; and I have further to express my conviction that many more infants can take and thrive on cow's milk, when properly administered, than is commonly supposed, and my belief that these prepared foods are substituted for milk very frequently to the great disadvantage of the child.

I will not occupy time in entering here into details which are familiar to all in regard to the preparation of milk for infants of different ages and conditions. Suffice it to say, that special directions should be given in all cases where there is evidence of poor nourishment, and especially where eczema is present.

As is well known, cow's milk does not represent human milk exactly, and often requires treatment to suit individual cases, different ages, etc. The large proportion of casein in it often renders it difficult of assimilation, and commonly it will require dilution for younger children, while the proportion of fatty matter can be conveniently increased by using the upper third of milk which has stood 2 to 4 hours, a little sugar of milk and salt being added to bring up these ingredients to the proportion found in human milk. It is hardly necessary to discuss further details in this direction, thus much is mentioned merely to qualify the claim that cow's milk is of universal service for young infants. In some cases cow's milk can only be tolerated when it has undergone the process known as peptonizing, when it will then seem to afford the most perfect nourishment desired.

In young infants with eczema, where the nourishment seems defective the greatest gain may sometimes be had from the addition of the yolk of an egg to the dietary. This may be given once daily, either raw, or lightly cooked, as poached or boiled, either alone or in connection with other food; the white of egg is not desirable, and should not be given. Cream also is often called for, and these will often be found to more than take the place of cod-liver oil, which, however, is likewise most serviceable in many cases of strumous habit.

I have not mentioned the use of barley-water in connection with the administration of milk because personally I am not in the habit of ordering it much, although it is recommended on high authority and is widely employed. In certain cases it acts well in the way of preventing the formation of too solid a curd, and undoubtedly the small amount of nutriment furnished by the barley may be of value. Gum arabic water will sometimes prove of service when added to milk, and possibly acts in the same manner.

I will not dwell upon the subject of the use of condensed and preserved milk, except to record my approval of them commonly in preference to many of the prepared foods such as have been already alluded to. While fresh milk is to be preferred where accessible, there are many occasions where these preparations of consolidated milk serve the purpose admirably well when properly diluted, and at times will seem to suit particular cases even better than fresh milk.

I wish to call attention to the value of wheat products as an element in the nutrition of infants with eczema, as well as in those of older years. Even quite young infants will be benefited greatly by the addition of crushed wheat to to their dietary, prepared as follows: The wheat is well boiled, and then left to stand all night, and again boiled thoroughly in the morning, the second time. It is then put in a fine sieve and water added to it, and it is rubbed until most of it passes through, leaving the hard and husky parts behind. This may then be given in a fluid state, either mixed with water, sweetened and salted, or with milk; or it may be eaten as a mush. In this manner the nutrient portion of the wheat is dissolved by the repeated cooking, and the phosphates and gluten are extracted with the starch, all in a very assimilable form, and are separated from the harder, indigestible portions, which often pass undigested and may do harm. Wheat given in this way furnishes, I believe, about the most perfect nourishment for the growing child, and with milk supplies all that can be desired. It is slightly laxative, and I have seen many cases of constipation overcome by its use.

Coming to older children, that is those between 1 and 3 years of age, when the teeth are pretty well out, it is often most difficult to regulate the diet in such a way that it shall minister to health or recovery from sickness, and it will often require the greatest watchfulness on the part of the physician to prevent the little eczema patient from being made worse by dietary indiscretions. The cereals should be given in increasing proportion, preference being given to

preparations of wheat, rather than oat-meal, which will frequently be observed to increase an eruption. Bread made from whole wheat flour should be encouraged, eaten with plenty of butter, which improves these cases, especially if they are under an alkali medication. Meat juice may also be given in moderation, but care should be exercised that it is not taken in excess, as there is danger of over stimulation, and I have repeatedly seen bad results from excessive use of beef-tea and animal food in these cases.

As the teeth are formed the diet must of course be more varied and more freedom must be given, and parents will often think children ill-nourished if they are not allowed a great variety, indeed if they do not take the food of adults. But the prodigious mortality from bowel troubles among children under 5 years of age reminds us that much knowledge is yet needed before those having the care of the young shall rightly attend to the diet. If life can be thus endangered, the same or other errors in lesser degree must affect the state of the child both in health and disease.

I will not take time to discuss more fully our interesting subject, or to enter upon more details in regard to the many possible matters in regard to diet which might be spoken of—they could readily fill a large book. Enough has been said to introduce the topic for discussion and to present the points which experience has shown me to be of importance in connection with our subject; briefly mentioned these are as follows:

1. The necessity of carefully watching the diet of infants with eczema, and giving special instructions that harmful articles may be avoided.

2. Specific instructions in regard to food and its preparation for these cases.

3. The more free use of milk, both for nursing mothers and for infants deprived of breast milk.

4. The taking of milk by adults apart from all other food in the interval before meals, when an alkaline state of the stomach facilitates its immediate absorption.

5. The more free employment of wheat products in the nourishment of older children with infantile eczema.

SCIENTIFIC COLLECTIVE INVESTIGATION OF DISEASE.

Read in Section on State Medicine, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

BY HENRY B. BAKER, M.D.,

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The purpose of this paper is to suggest how "collective investigation of disease" may be put upon a more scientific basis than is usually attempted, to urge the importance of such scientific investigations, and to point out how they may be equitably maintained, through the coöperation of physicians and governments. A few illustrations of what has already been accomplished will also be mentioned.

The term "Collective Investigation of Disease" has been employed by the British Medical Association to designate a method of investigation inaugurated by that Association in 1881, but urged by Dr. Arthur Ransom in a paper before that Association in 1864. The movement was favored by Professor Humphry, Sir William Gull, Sir James Paget and others. Referring to the first number of the "Collective Investigation Record," Dr. William Roberts said: "No one can read it attentively without acquiring a feeling almost amounting to a conviction that the movement is one of real importance, and that it will result in a large addition to our knowledge that could not have been got in any other way.[1]" Mr. Jonathan Hutchinson, has said: "Permit me to say then, that I cannot for a moment doubt that our distinguished associate, Professor Humphry, when he persuaded our Association to organize the large scheme which we are here this afternoon to promote, has done that which will prove of great and lasting advantage to medical and surgical science. It is a scheme which deserves from us all the best help that we can give it.[2]"

It is usually claimed that one of the chief objects for which medical societies are organized is the promotion and advancement of the medical sciences. The building up of an exact medical science cannot go on, with the greatest success, except through the collection of vast numbers of facts bearing upon each of the numerous questions involved, *and the union of those facts by methods which will admit of numerical expression.* General laws are reached only through such measures. Detailed histories of "interesting cases" of rare diseases, like the beautiful flowers along the pathway of the professional botanist, may serve as agreeable intellectual or emotional stimuli; but for the upbuilding of the medical sciences, we need the systematic collection and comparison of the most ordinary facts, and I think we must all agree with the Editor of the *British Medical Journal* when he says: "The chief aim of collective investigation, as applied to the main body of the profession, should be to collect simple everyday facts that can be easily observed and recorded, and which are of value only from their number, and not from the importance of individual observations.[3]"

There would seem to be no question that those diseases which are most common are the diseases which it is of most importance to study, for the purpose of learning their causes and how they may be prevented, avoided or treated. This being granted, it is proper to inquire whether the medical profession should not ask the coöperation of the *whole people* in promoting those medical sciences which tend directly to the amelioration of the physical condition of mankind. Leaving out of the question the subject of the *treatment* of disease, and confining it strictly to the subjects of the causation and best means of prevention of sickness. it would seem evident that the people as a whole should have much greater interests than the physicians have, and

[1] Brit. Med. Jour., Nov 3, 1883, p. 860,
[2] Brit. Med. Jour., Nov. 3, 1883, p. 862,
[3] Brit. Med. Jour., July 7, 1883, p. 20.

should, not only coöperate, but should supply the greater portion of the pecuniary means for such investigations. To a limited extent this is now done in one State (Michigan), and in my opinion the best interests of all will be subserved when it is done in every State in the Union, and by all Governments throughout the civilized world.

How can this be done? Perhaps as suggestive an answer as I can give will be to state how one line of such investigation *is* done in Michigan. In Michigan the State Board of Health supplies to physicians in different parts of the State printed blanks on postal cards addressed to the office of the Board. The blanks contain a list of the most common and most important diseases. After the close of each week each observer fills out and sends to the central office a report of the sickness under his own observation as a practitioner. The investigation thus far has been limited to the question of the presence or prevalence of each of the important diseases; and it is so planned and compiled as to give this information quantitatively by months. (It would give it by weeks if sufficient work were put into the compilation to make it show for weeks instead of by months.)

The times of greatest and of least prevalence of each disease being learned in this manner, a similar method of investigation relative to the principal meteorological conditions which prevail is carried on by means of observers in different parts of the State, who take and record tri-daily observations, and report them to the office of the State Board of Health. Tables are constructed showing the relations of each important disease to each of the important meteorological conditions; and diagrams accurately drawn to scale still more plainly show what those relations are. For instance, I show you a diagram exhibiting by months the relations which sickness from pneumonia bears to the atmospheric temperature, the diagram giving the averages of over 150,000 observations of the temperature, and of over 30,000 weekly reports by physicians. Of that which was contributed by the physicians who took part in this investigation, that which has been *used* from the report each week, was the fact whether the physician did or did not see a case of the disease in question. The State Board of Health supplied the blanks, the postage, and the compilation of the whole in connection with the meteorological data similarly collected and compiled. The results when published are sent to each observer, but they are published as the common property of the world. It seems that by this method we are able to learn the times of greatest and of least danger from each important disease; soon we should be able to see exactly what relation each meteorological condition bears to each important disease. If these investigations shall be carried on in different States and countries, we ought soon to be able to learn whether the meteorological conditions bear the same relations in all countries, or whether local conditions modify the results, and how they are modified. It may be practicable to extend the scope of such investigations by governmental coöperation. But at any rate, such coöperation as is now in force in Michigan, will make it possible for medical associations to direct *their* energies to investigations into results of different modes of treatment of diseases, and in therapeutic and other directions so as to supplement those investigations, as to causes and prevention, which it is manifestly the duty of Governments to maintain.

PROMPT REPORTS NEEDED.

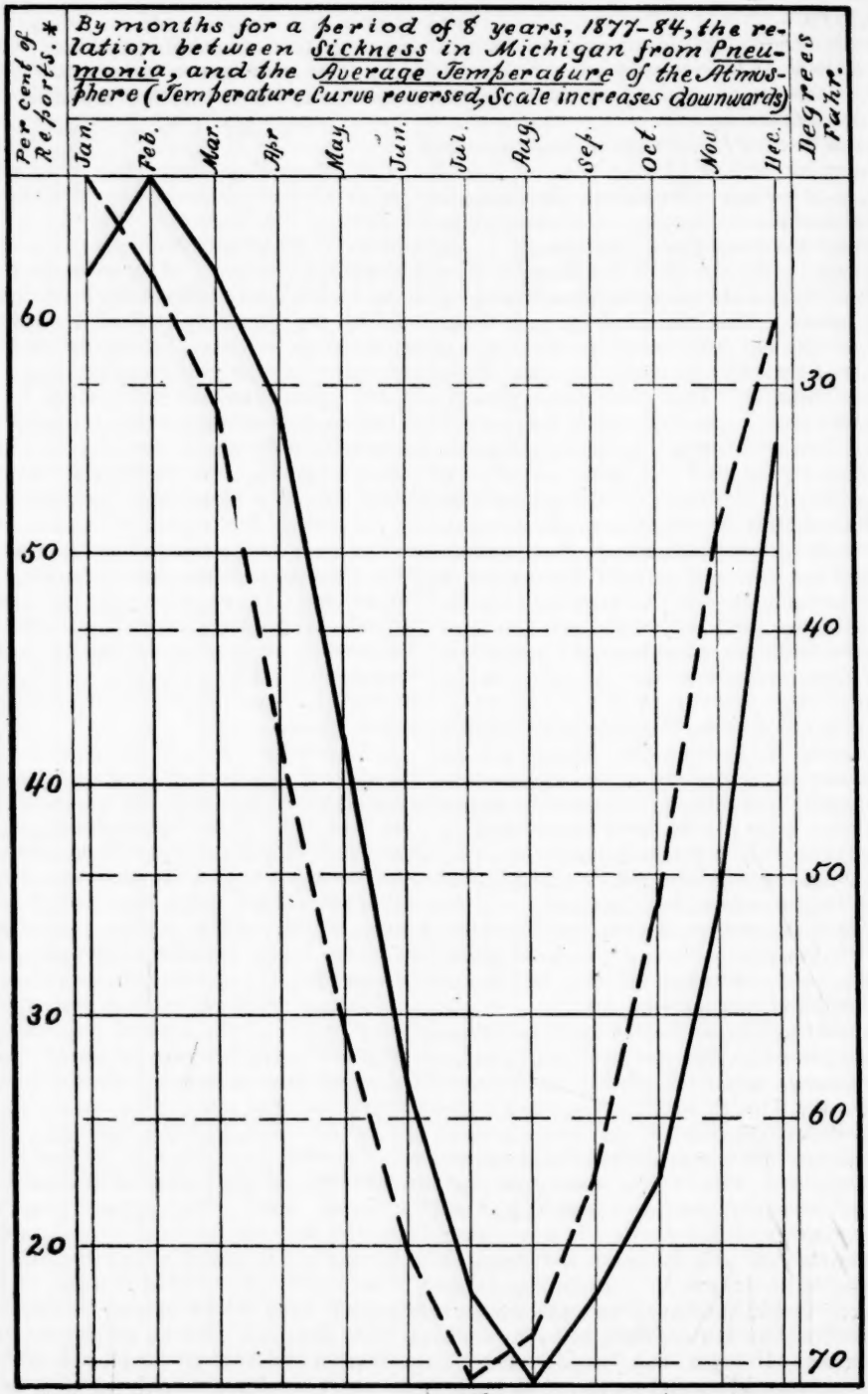
For the most accurate recording of *facts* which shall serve as the basis for the scientific investigation of disease, it is important that the record be made as near as possible to the time of occurrence of the phenomena recorded. Otherwise the record is likely to be molded in the direction of preconceived views held by the recorder, because his attention will be attracted to certain phenomena, and he will lose sight of, or sooner forget certain other phenomena. In Michigan it took several years to learn how *much* better weekly reports are than annual reports, for the purpose of studying the prevalence of any given disease. In April, 1876, the Michigan Board of Health issued a circular (somewhat like those since used by the Collective Investigation Committee) relative to scarlet fever, and collected facts of value, some of them relating to observations through many years; but on some points more precise information was desired. For several years a circular was issued at the close of every year, asking for facts which had been observed during the year just passed. But this method also was open to the objections which have been suggested.

In September, 1876, the Michigan Board of Health inaugurated a system of weekly reports of sickness, copying somewhat after the plan which for a single year was followed in Massachusetts.[4] At first the plan (in Michigan) was defective in that the reports were designed to give the observers best knowledge and belief relative to the sickness in his vicinity, and he was not directed to confine his reports strictly to the cases under his own observation. There was then an idea that a great proportion of the sickness in a locality might be reported with approximate accuracy by one of the several physicians in that locality. The present plan is based upon the belief that an accurate report of just what was seen by the reporter supplies much more useful facts for scientific study; and that an average practitioner in active general practice, will "in the long run," see an average of the cases of diseases which most frequently occur. The present plan supplies the facts, and they are reported within a week after their occurrence. It seems to me that this is Scientific Collective Investigation of Disease, and that it is an important work which should be entered upon by all State Boards of Health, and by a National Board of Health, and that physicians should seek to coöperate so far as practicable in such investigations.

SICKNESS REPORTS AS SANITARY NEWS.

I respectfully submit that the weekly or monthly records of deaths, which are now usually published

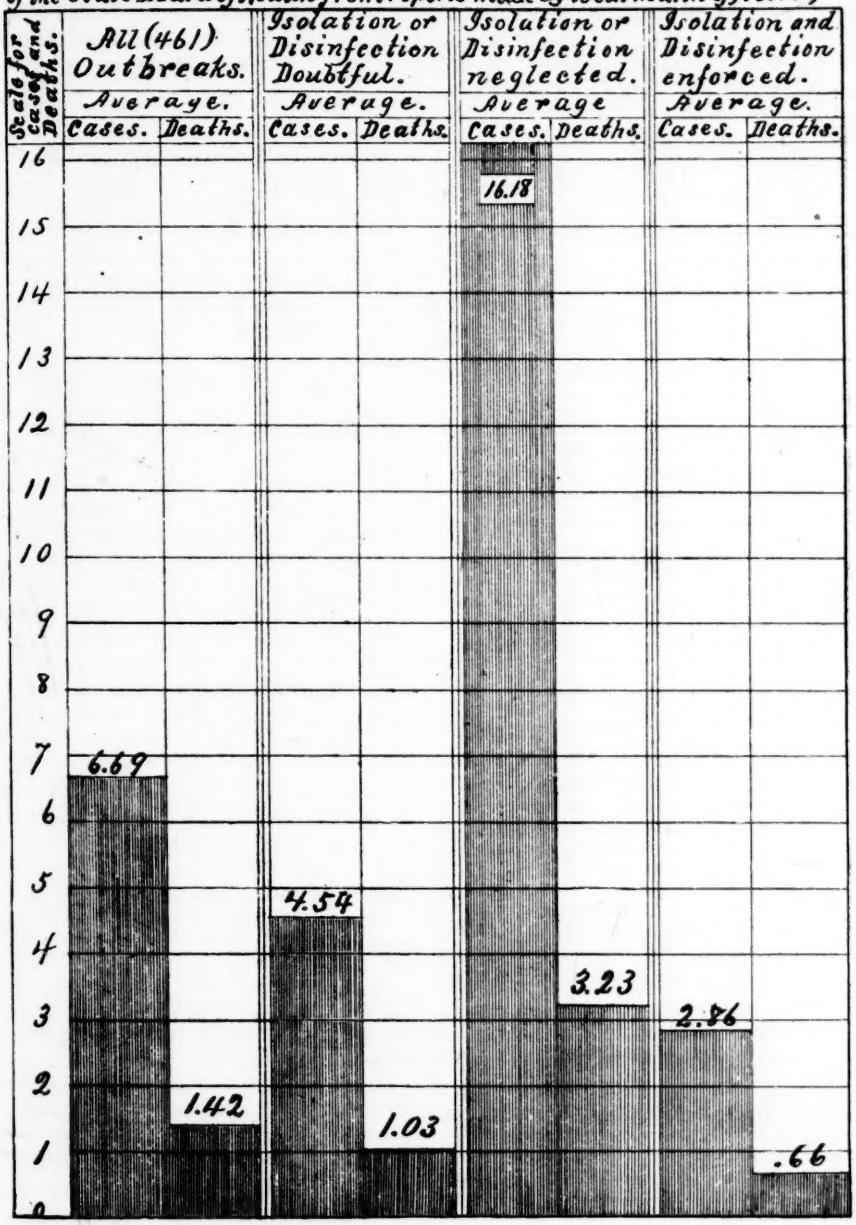
[4] I believe that a similar system was carried on in England for a short time about the year 1857, and that an unsuccessful effort to have the Government adopt and pay for its continuance, was followed by its abandonment as too expensive for private enterprise, by the physicians who had perfected it.



Sickness from Pneumonia _____. Average Temperature — —.
*Indicating what per cent of all reports received, stated the presence of pneumonia then under the observation of the physicians reporting.

Over 30,000 weekly reports of sickness, and over 150,000 observations of the atmospheric temperature are represented in this diagram.

Diphtheria in Michigan in 1886, exhibiting the Average Numbers of Cases and Deaths per outbreak:- (1) in All the 461 outbreaks Reported, (2) in the 243 outbreaks in which it is Doubtful whether or not Disinfection or Isolation were secured, (3) in the 102 outbreaks in which Isolation or Disinfection or both were neglected, and (4) in the 116 outbreaks in which Isolation and Disinfection were both enforced. (Compiled in the office of the Secretary of the State Board of Health from reports made by local health officers.)



by boards of health as items of sanitary news, might well be displaced or supplemented by statements of the average sickness which has been observed during the week or month, as the case may be, and reported on this plan of collective investigation. There are two good reasons why it should be done:

1. There are diseases, which cause much sickness and consequent suffering and expense, which are not correspondingly represented in the mortality statistics. I think this may be appreciated by a study of the bulletin of sickness in Michigan in the month of May, 1887, a copy of which I submit herewith, and from which it may be seen that neuralgia, bronchitis, and intermittent fever rank high as causes of sickness, while we all know that those diseases do not rank high as causes of death.

HEALTH IN MICHIGAN, MAY, 1887.

Reports to the State Board of Health, Lansing, by regular observers in different parts of the State, show the diseases which caused most sickness in Michigan during the month of May (four weeks ending May 28), 1887, as follows:

NUMBER OF REPORTS RECEIVED, 221.		For preceding month.
Diseases, Arranged in Order of Greatest Prevalence.	Per cent. of reports stating presence of disease.	Per cent. of reports stating presence of disease.
Rheumatism	71	79
Neuralgia	67	73
Bronchitis	57	64
Consumption of lungs	51	58
Intermittent fever	49	52
Tonsilitis	47	54
Influenza	35	43
Pneumonia	33	42
Diarrhœa	30	30
Remittent fever	30	30
Erysipelas	29	28
Measles	28	22
Inflammation of kidney	19	22
Inflammation of bowels	15	17
Whooping-cough	13	11
Cholera morbus	11	4
Dysentery	9	7
Typho-malarial fever	8	12
Inflammation of brain	7	4
Diphtheria	6	4
Puerperal fever	5	7
Cholera infantum	5	2
Cerebro-spinal meningitis	5	2
Scarlet fever	5	9
Membranous croup	4	6
Typhoid fever (enteric)	3	3

For the month of May, 1887, compared with the preceding month, the reports indicate that cholera morbus increased, and that pneumonia, influenza, rheumatism, bronchitis, consumption of lungs and tonsilitis decreased in prevalence.

Compared with the preceding month, the temperature in the month of May was much higher, the absolute humidity was much more, the relative humidity was about the same, the day and the night ozone were more

Compared with the average for the month of May in the nine years, 1879–1887, intermittent fever, remittent fever, consumption of lungs, scarlet fever, diphtheria and diarrhœa were less prevalent in May, 1887.

For the month of May, 1887, compared with the average of corresponding month for the nine years, 1879–1887, the temperature was higher, the absolute humidity, the relative humidity, and the day ozone were more, and the night ozone was less.

Including reports by regular observers and others, diphtheria was reported present in Michigan in the month of May, 1887, at thirty places, scarlet fever at thirty-two places, typhoid fever at four places, measles at fifty places.

Reports from all sources show diphtheria reported at five places more, scarlet fever at seven places less, typhoid fever at four places less, measles at fourteen places more, in the month of May, 1887, than in the preceding month.

Lansing, June2, 1887. HENRY B. BAKER, Sec'y.

2. Records of deaths are very valuable for purposes of study, but as indications of existing dangers they are not as good as reports of sickness. After the deaths have occurred, have been reported, and published, the time has passed for best guarding against the diseases which caused the deaths. On the other hand, prompt reports of sickness enable a State Board of Health to aid local health officers in restricting dangerous communicable diseases; and the publication of the facts concerning such sickness would be of much greater value to the people of the locality and to the health officers who would receive the reports in exchange, than are the present reports of mortality statistics.

INVESTIGATION OF PRACTICAL RESULTS OF SANITARY WORK.

Collective investigation can be successfully applied to many other results than those of the different modes of treatment of diseases. For instance, I show a diagram exhibiting, graphically, the results of different modes of action with a dangerous disease of children, namely, diphtheria, the facts having been reported, immediately after the outbreak closed, by health officers, to the State Board of Health, not exactly in accordance with the plan of coöperation by government and physicians, which I have recommended in this paper, but nearly so, because as yet the health officers have too little compensation for such official reports to entitle the government to have credit for the entire work. The evidence, when compiled and graphically shown, seems to me to be of immense value as a guide to proper efforts for the prevention of sickness and deaths. The diagram shows that in 102 outbreaks of diphtheria in which isolation or disinfection, or both, were neglected, the average number of cases was 16.18, and the average deaths were 3.23, while in the 116 outbreaks in which isolation and disinfection were both enforced the average cases and deaths were only about one-fifth as many, indicating a saving of about three hundred lives and 1,545 cases of sickness from diphtheria. The inference is strong that if this was true of one or two hundred outbreaks of diphtheria in Michigan in 1886, it may be found to be true in other States and in other years, in which case the knowledge gained by the investigation ought to be of immense utility in guiding to the saving of human life and health.

DISCUSSION.

DR. H. C. MARKHAM, of Independence, Iowa, thought this paper should give an impetus to our efforts at reporting.

DR. A. N. BELL, of New York, asked whether local conditions could not be included in Dr. Baker's charts. Many places of equal temperature would vary greatly in disease rate, on account of local conditions.

DR. J. M. ALLEN, of Liberty, Mo., thought that the States fail to discharge their duty in the matter of providing means for these investigations. In the present instance, therefore, we owe the State of Michigan a vote of thanks (as well as Dr. Baker), for its action has been exceptional.

Remarks were made by others, showing the extreme difficulty of influencing State legislators to act.

DR. BAKER said we must go slowly, but in time we can get at what Dr. Bell suggests. Money will be given more willingly when this work is also done in other States. Michigan has done well in this matter since 1876. Massachusetts carried on the work one year and then dropped it.

THE PROPRIETY AND NECESSITY OF STATE REGULATION OF MEDICAL PRACTICE.

Read in the Section of State Medicine, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887,

BY PERRY H. MILLARD, M.D.,

FIRST VICE-PRESIDENT AMERICAN MEDICAL ASSOCIATION, EX-PRESIDENT MINNESOTA STATE MEDICAL ASSOCIATION, SECRETARY MINNESOTA STATE BOARD OF MEDICAL EXAMINERS.

In the year 1237 the college at Salino, which was founded early in the eleventh century, instituted a series of regulations to the effect that no one should practice physic who had not studied philosophy three years and physic five, and had obtained the license of the college after undergoing an examination at the end of such period. Very similar regulations were shortly thereafter adopted by the English universities, and the standard of medical knowledge and education was thereby considerably raised, and a great impetus given to the pursuit of medicine. The first degrees in medicine can be traced back to the year 1384.

We find by comparison, that one hundred and fifty years before degrees or diplomas were granted, the universities licensed candidates to practice only after they had pursued philosophy three years and physic five, and that six hundred and fifty years thereafter, in 1887, the requirements of 73 per cent of the schools of the United States require only two courses of lectures and three years' study. It would, however, be unfair for me to omit the startling fact that a certificate of good moral character is a *sine qua non* from all the schools of this country.

The first law regulating the practice of physic in the United Kingdom was enacted in 1511. The practice of physic at this time was largely conducted by the ignorant portion of the artisan class. Degrees, however, conferring the right to practice, were held in very high esteem by the people.

The progress of medical knowledge during the seventeenth century has been ably described by McCauley, in vol. 1, page 310, of his History. "Medicine," he says, "which in France was still in abject bondage and afforded for Molière an inexhaustible subject of just ridicule, had in England become an experimental and progressive science, and every day made some new advance in defiance of Hypocrates and Galen. The attention of speculative men had for the first time been directed to the important subject of sanitary police."

To that period belong the chemical discoveries of Boyle, and the first botanical researches of Sloan. One after another, phantoms which had haunted the world through ages of darkness, fled before the light, and astrology and alchemy became jests. Upon research I find that in ancient times effective medical legislation and higher medical education progressed hand in hand. After extensive research I am unable to find that any court or legislative body in the British Isles or Continental Europe ever questioned the propriety of effective medical legislation.

It seems quite absurd that the propriety of regulating the practice of medicine should be questioned by any respectable portion of the profession of this day. My experience, however, teaches me that such opposition is quite pronounced with a few. Their principal reasons for such opposition lies in their misguided interpolations of the functions of a republican form of government, and an extreme conservatism in all matters pertaining to their chosen profession. Those of us who have been missionaries in this work of reform for some time have not infrequently found the representations of many of our reputable medical schools working arm in arm with the long-haired quack, in their endeavors to strangle the crudest forms of legislation. I make the broad assertion that practically the only opposition to effective medical legislation in this country comes from the profession itself, and that this opposition comes principally from the representatives of the seventy-nine medical schools of the United States, that continue to graduate men upon the courses of lectures of twenty weeks' duration each. It is unnecessary that I should point to New York, Illinois or Minnesota to verify my assertion. It is certainly the duty of the chosen representatives of the people, the legislature, to protect an ignorant and credulous public from empiricism and imperfectly educated medical men and women. No profession or vocation is allied so closely to his material interests; yet, in the selection of a medical adviser the community, not infrequently, cares but little for a man's actual medical ability. The masses of the community, in the selection of a family physician, make it upon personal grounds alone. Were one of us stricken by disease or accident in the streets of this city, we would probably obtain more skillful treatment at the average hospital than at a friend's house upon the most fashionable avenue. The propriety of the regulation of the practice of law is never questioned. Every State in the Union regulates the practice of law with an iron hand. The attorney that defrauds his client has his license revoked, and there is no complaint thereat. Ecclesiastical councils regulate the actions and utterances of their clergy by canons quite as strict as in the days of Martin Luther, and the courts endorse their findings with the precedent of the common law as their argument. In the cities, the construction of our homes, even, is superintended by the sanitary police.

It is, however, ordained that in our profession, the noblest of them all, we shall be left to a competition that is intolerable to an educated man. I find upon examination of the literature of medical legislation, that the United States is the only civilized country that is devoid of restrictions regulating the practice of medicine. There are at the present time, however, about thirty States with so called medical prac-

tice acts. The new acts of Minnesota and Virginia are the most nearly ideal of any, as they are a deadly blow at the cheap schools of this country. They fail to recognize the diploma of any school, and examine all parties commencing the practice of medicine.

The laws regulating the practice of medicine in Illinois, West Virginia, Minnesota, Missouri and Iowa, have accomplished much in certain directions. Their efficiency has been very apparent in weeding out the itinerant quack and undergraduate. In Minnesota the number of undergraduate practitioners has been reduced from 37 to less than 8 per cent. in four years. In Illinois the reduction has been quite as great. It is the experience of these boards that the average American diploma does not command the respect or confidence of either the profession or public. They find that, as a general rule, colleges are private corporations, operated by and in the interests of a few individuals, whose personal and pecuniary interests—acting with the tendencies of competition—have brought about a state of affairs in which a diploma has practically ceased to furnish any reasonable presumption of respectable professional acquirements.

We find the number of graduates in this country since 1880 to be 27,000, and the number of practitioners of medicine about 100,000. This gives us an increase of the number of physicians at the rate of 5 per cent., to an increase of population of less than 2 per cent.

In short, the number of graduates of medicine in this country since 1880 closely approximates the combined output of the medical schools of the British Empire, France, Austria and Germany, combined. We find that the system of placing the licensing power in the hands of a body directly responsible to the people and entirely independent of and disconnected from the teaching bodies, is the one which prevails in almost every civilized country in the world. We have in the practice of medicine in the United States to-day, one physician to every 755 inhabitants. They have in England and Hungary one physician to every 1666 inhabitants; in Italy, one physician to every 1639 inhabitants; in Austria, one physician to every 2932 inhabitants; in Germany, one physician to every 3225 inhabitants; in France, one physician to every 3780 inhabitants; in Sweden, one physician to every 7909 inhabitants. It will, therefore, be seen that the proportion of physicians to the population is ten times as great in this country as in Sweden, four times as great as in France, Germany and Austria, and twice as great as in Great Britain, Italy and Hungary.

The number of medical schools in this country is on the increase, and this increase is not in response to the demands of either the profession or public. Of the 130 medical institutions in this country, less than one dozen are in any way endowed. Seventy-nine colleges of this country graduate men upon two courses of lectures and three years of pupilage. We find by a report of the United States Commissioner of Education for the year 1881, that there are $2,672,490 invested in the ground, buildings and apparatus of the medical schools of the United States. The amount of productive funds of these schools is $266,193, and the annual income from investments only $22,000.

When we examine the facilities and demands of this country, with those of the British Isles and Continental Europe, we necessarily conclude that the foreign schools exact too much, or that our system is painfully crude and lax. The Commissioner of Education remarks that, considering the enormous amount of knowledge that has been accumulated respecting the proper treatment of disease, its prevention and its nature, the impression becomes irresistible that we have been influenced by our national impatience and furious haste in this matter, as in many others, and that we have allowed the students to dictate the length of time they are to study, instead of obliging them to prepare suitably for this important course of instruction and to spend enough time to receive it properly and retain it securely. I can but conclude that the low standard of medical education and the absence of uniform legal requirements by the respective States, is the cause of the overcrowded condition of the profession of this country.

Dr. Rauch, in his "Eighth Annual Report," asserts that there are from 1,500 to 2,000 more physicians in practice in this State than are necessary to supply the legitimate demands for professional services, and who are not earning a comfortable livelihood by legitimate professional exertion.

How to prevent the flooding of this country with half-educated medical men, will be the vital question with the profession in the coming decade. I believe the only efficient remedy lies in efficient medical legislation. Having this, the cheap two course school cannot continue to exist. With efficient Boards to examine all parties commencing the practice of medicine, a school will best be known by the proportion of its alumni that are able to pass the required examinations, instead of by its numbers and flexible curriculum. The profession has been aiming its arrows of criticism at the schools the past decade, and the product of their labors has not been commensurate with their demands. These schools are perpetrating a rank injustice to the schools that are striving to exist by enforcing a curriculum that commands the respect of the profession. They are perpetrating a similar injustice upon the masses of the profession and the public, and unless it ceases in the near future, I predict a revolution of sentiment that will swing the pendulum to an opposite extreme. The present aspect of medical legislation in this country is painfully unsatisfactory. We have not an ideal Medical Practice Act in any State in the Union. The nearest approach thereto is the new Act of Minnesota. By the provision of this Act, every person commencing the practice of medicine must pass an examination and furnish satisfactory evidence of having taken three full courses of lectures of not less than six months' duration each.

Under existing circumstances, it is our duty to secure efficient medical legislation in every State in the Union. The essential features of such legislation should require a minimum of literary and profes-

sional acquirements. The time of study should be not less than four years, of not less than three full courses of lectures of six months' duration each. The respective Boards should be empowered to refuse or revoke licenses for chronic inebriety and grossly dishonorable conduct. The power conferring the right to refuse or revoke a license should only be used in flagrant cases.

The respective Boards should be appointed by the Governor and confirmed by the Senate. The term of service should be three or five years, and no member be allowed to serve to exceed two terms in succession. The Governor, in the selection of members constituting the Board, should aim to obtain the most intelligent and honorable gentlemen at his command.

It is proper that established schools of practice should have representation upon the Board, but the examiners should confine their examination to questions common to all schools of practice. All examinations should be held in public, and made a matter of record. The several papers should be accessible to properly interested parties at all times.

In conclusion, gentlemen, allow me to direct your attention to the social and financial status of the medical professson of this country. Had we been alive to our interests, our present environment would have been far different, the pursuit of medicine would offer better inducements to the educated masses today. Finally, let me insist upon a renewal of our zeal in behalf of our material interests, and coöperate in obtaining at the hands of the legislatures of the different States such regulations of the practice of our profession as will place the standard thereof upon a citadel of greater strength and power.

DISCUSSION.

Dr. James E. Reeves, of Wheeling, W. Va., remarked upon the importance of the paper, but advised caution in making a common standard for the practitioners of all communities. There are some communities where a man of first class medical qualifications could not live. It would not pay such a man to settle down in a community where there are only forty or fifty inhabitants, and they of the common class. Therefore such a community might be left without a physician. The demand regulates the supply. Provision must be made for the out of the way places. He would therefore counsel to go slow and to exercise judgment in the matter of a standard, if the same questions are to be asked of all applicants for license to practice.

Dr. J. M. Allen, of Liberty, Mo., suggested that there should be a supervising college of the United States. Each State should have its standard, and there should be but one power in the State for granting diplomas.

Dr. W. L. Schenck, of Osage City, Kansas, said: In Kansas we have no medical school, and want none until the State can endow one without regard to the number of students.

A resolution was passed appointing a committee of five, to report at the first meeting of the Section next year, to frame a bill for recommendation to different States, regulating the practice of medicine. This committee consists of Dr. P. H. Millard; Dr. H. A. Johnson, of Chicago; Dr. R. H. Plummer, of California; Dr. Geo. B. Belt, of Massachusetts; and Dr. C. W. Dulles, of Pennsylvania. The committee was instructed to report to the Section on the first day of the next annual meeting.

THE TREATMENT OF MALARIAL FEVERS IN THE INFANT AND THE YOUNG CHILD.

Read in the Section on Diseases of Children, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

BY W. B. LAWRENCE M.D.,
OF BATESVILLE, ARK.

As a great majority of my cases of sickness in children have been of malarial origin, I will at least make an attempt to give some of my ideas, or rather mode of treatment, of such diseases. I said a great majority of my practice is of this character, which, no doubt, is correct, as I can only call to mind two cases of diphtheria treated, and I have been through a mild and short epidemic of scarlet fever in a practice of ten years. Still, at the same time, I do not wish to convey the idea that our part of Arkansas is more pregnant with malarial poison than many other portions of the United States, which are not considered uninhabitable.

My home is an old town, and a place probably of 2000 inhabitants, with the surrounding country thickly settled, and the town several hundred feet above the sea level, situated on quite a hill, at the foot of which runs a beautiful and rapid river. Still the Eastern winds ftom the great Mississippi Valley bring us more or less of this poison, the year around. Flint says this poison shows itself in the shape of the different fevers in the interior Valley of North America. The regions in which it has most frequently prevailed, are the level portions of Alabama, Mississippi, Louisiana, the Southern Shore of Lake Michigan from Chicago around to St. Joseph River, and Lake Erie and Lake St. Clair, from Lake Huron to Lake Ontario near estuaries of the creeks and rivers. So you see from this that when we leave home, we do not always leave the malaria behind us.

My desire is only to speak of the treatment of these fevers according to the By-laws of our Association; I would not have the time, if I felt in the least competent or inclined to undertake the work of saying anything of the clinical history, anatomical characters, causation, diagnosis and prognosis. Many of us are so unfortunate as not to be able to write a very simple and interesting article on any topic or disease, although we have had the opportunity of treating and watching these diseases in all of their many forms and stages; and if such be true, how much less able are we to write of something which we have never seen, or had any dealings with, except what others have told us; or in other words, we must give our own ideas and experiences, and at the same time lay them right open for criticism. After some persuasion, I offer this as an effort to add something to our Section. Let each one have am-

bition enough to bring it forward. Men of pride do not like to lag and see any of their undertakings sink into insignificance or die. So, if we have any pride for the much neglected Section, each one must attend and offer something. And another reason for attempting to present this subject, is this, that our standard text-books on diseases of children, such as J. Lewis Smith and Ellis & Vogel, say but little. Certainly, we find quite an exhaustive article on the subject of the treatment of malarial fevers in the great works of Flint and other good authors, but they do not speak specially concerning the fevers, or the treatment of such in infancy and childhood, and certainly articles applying strictly to such would aid the practitioner very much in his treatment.

Dr. J. Lewis Smith, in his most instructive and readable work on "Diseases of Children," under the head of "The Treatment of the Different Malarial Fevers," covers the whole subject in forty or fifty lines, and does not mention more than six or eight different drugs. Vogel and others go over the subject in about the same manner. Most of them place but little importance to the management of these fevers in any form. In most of the different types of these fevers, and especially if bordering on a pernicious form, they certainly require much attention, although the patient may not be in a dangerous condition; for this reason the little fellows suffer so much with sick stomach, restlessness, and often accompanied with convulsions. With these symptoms, these children's parents cannot be satisfied until some relief is afforded, and especially during the convulsive period.

Numbers of writers will say that in all forms of these fevers, cinchona or some one of its preparations is the "sheet anchor." Admit such to be the case, keeping the anchor in the patient's stomach is often a task of itself, and very frequently we fail in the attempt. Another assertion is this: "Open the bowels with a mild purgative or an enema." We will try to show that such treatment in some cases, will not afford any relief, for the mild purgatives, such as senna, rhubarb, castor oil and magnesia often cannot be tolerated, and can in a more pernicious type after acting on the bowels, afford but slight relief. I believe such to be the case.

I will first endeavor to speak of the treatment of the milder forms of intermittent fever, either of a quotidian, a tertian or a quartan. *First*, in the simple or mild intermittent fever, and I presume we are to understand by this fever one wanting in grave or alarming symptoms, I do not think it necessary but to barely mention the fact that the bowels should be opened, and one of the preparations of quinine given in doses according to age, which of course, means a sufficient quantity.

Of pernicious intermittent fever, this form in many cases can be prevented, and many lives saved, by attention during and after the first paroxysm, that is we prevent others of a grave and maybe a fatal type. When the fever becomes pernicious, we have two objects in view, namely: to see our patient through the existing paroxysm, and to keep off another.

In the first of these, suppose our case an infant, for example, say 4 months of age. In the cold stage, my experience is that they remain for a shorter time than older children or adults, and that we can more quickly, and with less work bring about reaction. In the 4-month infant, or maybe some older, this is generally done by applying heat to the surface or wrapping the child in a blanket. But we may have much trouble with this aged infant in the hot or fever stage, and more especially if it goes into convulsions. Should the fever go very high, aconite nitre, paregoric and bromide of potassium in water, dose according to age; the sick stomach which we frequently find to be very annoying, is oftenest relieved by bromide of potassium or a creasote mixture. If convulsions come on, put the little fellow in a warm bath or wrap in a warm wet sheet or cloth of a proper kind, move the bowels as soon as possible by enema, and if you can't give the antispasmodic by the mouth, administer it per the rectum, such as hydrate of chloral or bromide of potassium. As soon as the sick stomach subsides and the temperature is on the decrease, as a general rule, I think it quite necessary to give an active purgative. Not always, but quite often, order mercury in the form of calomel, and in these extremely pernicious attacks, I have not been able to find anything to take its place. I will say just here that I have never administered a dose of mercury in any form to either an adult, child or infant, that did the least harm in the way of salivation; in fact I never had but two of my cases in the least affected by it, and these very slightly and for only a short time.

As soon as the patient can bear quinia, we begin it, whatever the type, and if quotidian, we have no time to lose. So we try to give our 4 and 6 months', or probably 12 months' infant a sufficient quantity of quinia sulph. We have tried it in many forms, not as the saying is, to "disguise the taste," but rather to prevent nausea, such as elixir of licorice, lavender, malt, aromatic elixir, and also the cascara cordial. In some cases all fail; however, as a general rule, I find the licorice the surest; I think the cascara cordial acts too much on the bowels. On account of this sick stomach in a number of cases are forced to give the anti-periodic in another mode or channel, that is *per rectum*, or by inunction, and with our little syringe and quinia we get much satisfaction from the rectum plan. Of administering quinia by inunction, I will say but little. I frequently order in large quantities; still I am not able to say how much good it does in preventing a paroxysm, but think it aids in many cases to a certain extent. I have never ordered it in anything but pure hog's lard. I will mention a case as an example: I have a little niece 2½ years of age. She has had two or three attacks of ordinary intermittent fever. In the first spell, I ordered sulphate of quinine in an antinauseating mixture, but she could not retain a single dose; then I ordered it by inunction, which prevented a second paroxysm of anything like serious nature. The child is now 2½ years of age, and has never taken but the one dose by the mouth, which was vomited. I have several times used the inunc-

tion, and it looks very much as if it has prevented pernicious attacks.

Concerning the treatment in this form of fever in the young child, say 5 or 6 years of age. These cases we can manage with more satisfaction to ourselves than we could in the infant, for the reason that it will allow more to be done for its relief. In the cold stage we will find often more urgent treatment required than in the little fellows. I should, in the first place, see that the heart's action is kept up towards normal, if possible, with stimulants; they may be alcoholic, brandy or whiskey will suffice, but if they fail I should try ether, and with it ammonia, by inhalation and mouth. I have also very frequently given nitrite of amyl by inhalation, dose ♏ ij–v in a handkerchief is a very convenient mode of administration, and I have found this to to be a very valuable remedy. In fact, I think it one of the best stimulants in this stage of the disease. In some cases, at this age, I have given morphine hypodermically, and especially in cases suffering with sick stomach and restlessness, I find that it affords great relief, brings about quiet, and aids good circulation very much; and in many cases is the only thing that will give relief. I have given chloroform in from eight to ten minims, but with little good, if any. While administering the above remedies, or some others, I order mustard in the form of plasters to the ankles and wrists and, at the same time, friction with flannel cloths.

Now, after helping to nurse our patients into a hot stage, we, if this hot stage becomes serious, try to cool them down. In some cases this is the alarming period; in others just the reverse. I give about the same febrifuges as mentioned heretofore. Sometimes I resort to the tr. verat. viridide. I have never given antipyrin to children with those fevers; I have ordered it this winter and spring in a few cases of pneumonia with a very high temperature, say 104° and 105°; it always reduces the temperature, but I think prostrates more than veratrum. I have found but little if any good from quinia in this hot stage. I almost invariably find it necessary to employ quite an active purgative and give it as soon as possible. I have given rhubarb in different forms, powder and fluid extracts, senna and podophylin, and many other drugs. I have not found anything to take the place of calomel. If you have a quotidian type you have no time to spare; so administer the purgative, and while the patient is taking it, if the stomach will tolerate, give within 12 or 15 hours, gr. xx of quinine. We may be compelled in some cases to give it as suggested in the cases of the infants. If the case require anti-spasmodics, give them, or about as suggested for the infant; only the dose in proportion to the age.

In the treatment of remittent fever, so soon as you are sure you have this form of fever to treat, there is that old remedy which is required in all cases, namely, cinchona, or its equivalent, quinia. In sthenic cases I should employ a light febrifuge, and as soon as the fever gives away, give a proper amount of quinine, for restlessness; in insomnia, give bromide of potash and comp. pulv. ipecac; open the bowels freely, apply frequently cool cloths to the head, and order a warm mustard foot-bath. These remedies often do much good.

We may be forced to do more than this if the fever takes on a pernicious form. The patient may require chloral hydrate or morphine to quiet him, of a mild, mercurial purgative, frequently combined with santonine, followed with oil. To break up an attack of remittent fever without these things, is often impossible. I have had many a patron to say: "Doctor you will have to come to our child. It has had fever for three or four days, and a 'high one.' We cannot break it. We have given pills or oil, or probably one, or half a dozen domestic purgatives, and followed with a good amount of quinine for two or three days; but our treatment does no good." And if I find such to be the case, I generally give the calomel and santonine, and in a number of cases never make a second visit. The fever gives away in a number of instances within 10 or 12 hours. But frequently in a child of from 5 to 8 years of age, this fever will continue in spite of all our treatment, for 10 or 15 days, and maybe longer. After active treatment for 3 or 4 days, and the symptoms point to such a continuation, we begin a treatment similar to that of typhoid fever; that is, use tonic doses of quinine and one of the acids. A mild febrifuge, if necessary, keeps the bowels regular, and light stimulants after fever has continued some days. Order iron to be given for a short time after the fever has given away.

I will only say a few words of the treatment of that pernicious form of intermittent commonly called in the South, "Hæmorrhagic Malarial Fever." It is always considered dangerous. I have never seen a case of it in the infant, and very seldom do we see a case in our part of the State, either in the adult or the children, however, occasionally in both. Our plan is to keep the patient well cared for in blankets, use mustard freely in form of plasters over the region of the kidneys and stomach; give active cathartics but very little quinine; it seems to aggravate the disease. The restlessness and sick stomach are best controlled by hydrate of chloral or bromidia. During the passage of blood so freely, give buchu, fluid extract of, and hyposulphite, dose according to age.

I would like to say something of the treatment of chronic malarial poison, but do not wish to be tedious to the Section, and for that reason, am afraid I have not done this subject anything like justice.

MEDICAL PROGRESS.

THE AFTER-TREATMENT OF DIFFICULT LAPAROTOMIES. — P. MÜLLER, of Berne, reports a case in which adhesions took place between the anterior and posterior walls of the abdomen over an extent of 25 cm., in such a manner as to include a knuckle of small intestine. In order to prevent such accidents he advises the avoidance of bandages which exert pressure in all cases where there are extensive wound surfaces in the peritoneum. In the second place he

proposes to prevent adhesions by filling the abdominal cavity after laparotomy with a sterilized neutral solution. He employed this method in a case in which he found extensive adhesions, using 2,400 grams of a 0.7 per cent. solution of salt, which he poured into the abdominal cavity through a drainage-tube introduced into the upper angle of the incision. This sufficed to fill up the cavity, occupying as much space as the tumor had previously taken up. Soon after the operation the patient was seized with dyspnœa and the pulse ran up to 150. Then profuse diaphoresis and diuresis gradually relieved the artificial ascites, which disappeared by the sixth day. The results with regard to the prevention of adhesions were entirely satisfactory. The writer believes that it is unsafe to employ as large a quantity of the solution as he did in his own case, but he intends to experiment in the same direction with smaller quantities, to be thrown in every 3 hours by means of the double canula, or to be employed by means of permanent irrigation.—*Centralbl. für Gynäk.*, No. 25, 1887.

THE EFFECT OF HYOSCINE HYDROCHLORATE.—KOBERT, of Dorpat, Russia, is quoted as follows by *Schmidt's Jahrbuch*, 1887, No. 7, in the results of his use of this drug as a sedative:

Hyoscine, when given in large doses, is excreted as such by the kidneys. A small amount of the urine of an animal thoroughly under the influence of hyoscine, when dropped upon the heart of a frog which had been poisoned by muscarine, will cause the heart which was quiescent to beat. Hyoscine is thus an antidote to muscarine. In the same way, muscarine, by its stimulant power over the pneumogastric, will cause a heart to beat which had been stopped by hyoscine. The effect of the drug is the same upon the human subject as upon the frog. In the case of a patient with melancholia, whose pulse was slow, an injection $\frac{1}{60}$ of a grain produced a very perceptible acceleration. In small doses, of $\frac{1}{120}$ to $\frac{1}{60}$ of a grain, hyoscine is a weak narcotic to healthy beings. Numerous observations made upon the large numbers of patients at the Dorpat Clinics for Insane Patients, have proved its excellence as a reliable hypnotic, when given subcutaneously in doses of $\frac{1}{120}$ to $\frac{1}{60}$ of a grain of the hydrochlorate. A peculiarity of the use of hyoscine was the absence in the cases noted of all ill after-effects produced by the drug.—*Therapeutic Gazette*, Aug. 15, 1887.

STROPHANTHUS IN HEART DISEASE.—MR. MONTAGUE D. MAKUNA says: Having recently had occasion to prescribe it in two cases with excellent results, I take this opportunity of bearing testimony to its action as a certain cardiac tonic and powerful diuretic, with a hope that it may induce others to use it when they find themselves in a dilemma, and feel anxious to resuscitate the failing action of the heart. I have used it firstly in four cases of angina pectoris, in two cases associated with dilatation of the heart. A fortnight ago I was hurriedly called to see a young man, aged 25, in an agony of pain, with tumultuous action of the heart. Within five minutes of the administration of a five-minim dose his breathing became quiet, pain disappeared, and the rhythm of the heart's action was restored. In two cases of dilatation of the heart, the patients took five-minim doses three times a day with marked benefit.

Secondly, I have used it in two marked cases of fatty degeneration of the heart. I had a patient, aged 45, under treatment when Prof. Fraser read his paper, and whose life was altogether despaired of at the time. The state of degeneration was much advanced, and she had some general dropsy. She lived to take it for nearly eight months—five-minim doses three times a day; but about six months after its first administration the cardiac response became more and more feeble, until she succumbed. I believe her life was prolonged with some comfort solely by the use of strophanthus. I have at present a case of fatty degeneration of the heart in a woman, aged 49, accompanied by attacks of angina, much dyspnœa, and palpitation. I have administered to her five-minim doses every hour till the action of the heart is quieted and the breathing rendered easy. She now takes it three times a day in the form of a mixture, which can be safely trusted to the patient, namely: Tinct. strophanthus, f℥iss; extract ergot liq. f℥vj; spirit chloroform, f℥iss; aquæ lauroceres ad. f℥iv; a teaspoonful three times a day in a wineglass of water. The latter patient has taken this mixture during the last week with marked benefit.

I have had, unfortunately, the experience of tincture prepared from other parts of the plant than the seed, in two cases which eventually proved fatal. Judging from actual observations at the bedside, I cannot but pronounce it as uncertain in action and totally unreliable, notwithstanding the assurance of the druggist of its equal efficacy when the supply of the seeds had gone out of the market at the end of last year.—*British Medical Journal*, Sept. 3, 1887.

NAPHTHALIN IN PILL FORM.—BERNBECK has found that a pill covered with elastic collodion is especially useful in administering this drug. His formula is:

℞. Naphthalini resublimat., 10 parts.
Rad. althææ pulv., 5 parts.
Mucil. gummi arab., q. s.
Ut. fiant pilful 100.
Dry without heating, and cover with elastic collodion.
Sig. Two or three pills three times daily.

The remedy is especially useful in gastro-intestinal catarrh. The advantage of the collodion coating is in the fact that it is dissolved in the intestine and not in the stomach, and that no unpleasant taste is experienced from eructations. For the success of the collodion coating it is essential that the pills be carefully dried before its application.—*Deutsche-Amerikanische Apotheker-Zeitung*, June, 15, 1887.

MARINE SALT IN ANÆMIA.—HEGAR has used hypodermatic injections of a 6:1000 solution of marine salt, pure and recrystallized, with good results in anæmia. The condition of the circulation was improved, as was shown by sphygmographic tracings.—*Révue de Thérapeutique*, August, 1887.

THE
Journal of the American Medical Association.
PUBLISHED WEEKLY.

THE EDITOR OF THIS JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

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Address
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 65 RANDOLPH STREET,
CHICAGO, ILLINOIS.

SATURDAY, OCTOBER 15, 1887.

THE NINTH INTERNATIONAL MEDICAL CONGRESS.

That the many readers of THE JOURNAL may know the real character and success of the recent International Medical Congress in Washington, we copy the following leading article from the London *Lancet* of September 24, 1887, pp. 617 and 627. Certainly no higher or more impartial authority could be invoked. *The Lancet* says:

"The success of the Ninth International Medical Congress is a matter for thankfulness. The interruption of the series of Congresses would have been little less than a calamity and a disgrace for the profession in all nations. Any serious imperfection in the meeting, either as respects numbers or the character of the discussions, would have been but little less unfortunate. But the Congress has been held under most honorable auspices; the famous hospitality of the United States has been fully realized; and those who went great distances to attend the Congress have been amply rewarded, and will return to their various countries and duties with higher impressions of their calling and deeper convictions of its progress, both on its scientific and its medical side. We cannot but rejoice that our own country was well represented in many of the Sections; the names of many well-known English physicians and surgeons will have been noticed in the reports which were received by cable from our special correspondents at Washington. We confess that we read the report of the concluding proceedings of the Congress with the moft pleasurable emotions, and not least the remarks of the English members. A break-down of the Congress in Washington would have been only a less acute pain to us than a break-down in London. And we accept the concluding speeches of our countrymen and of our *confrères* of Berlin and Paris, Dr. Martin and Dr. Landolt, and others, as proof that the Congress has been worthy of its predecessors, that it contained a larger gathering of foreign members than any of them, and that it is calculated to promote the advancement of our art. Those in the United States who have worked to this end, in spite of much discouragement, well deserve the gratitude which was accorded to them by formal resolution. We have purposely abstained, in our allusions to the Congress, from pointedly referring to the domestic differences among our brethren in the States, which threatened to seriously mar the success of the Congress, if not to prevent it altogether. Those who persevered in spite of all opposition, and who have carried through the Congress so successfully, may well be satisfied. They have done a great service to their country and to their profession in all countries. It is not necessary for us to say that they committed no faults and made no mistakes. Such praise is not for mortals in a world so full of 'spilt saltpetre' as ours. But they have carried through the Congress, and we thank them. There is yet one other service they can do: in any official action that now devolves upon them, to strive to obliterate the last relics of discord, and to hand on the light of truth and charity, undimmed and unqualified, to those in Berlin on whom will now rest the burden of responsibility for the next Congress. They can well afford to be magnanimous, and to help to make the representation of the States at Berlin so complete as to bear no traces of recent divisions.

"The scientific value of the addresses and papers read at the recent Congress cannot be estimated till we have seen them in full. On the whole, judging from abstracts of the papers and discussions, we are inclined to say that they have been practical rather than theoretical, and have had reference to useful rather than transcendental aspects of medicine. Neither, so far, have we met with much indication of original matter in the papers. But this is no dispraise. It was meet that in the most practical nation in the world papers and discussions should take a practical turn, and deal with questions at their practical point. No branch of medicine can be said to have been neglected, from that which deals with the brain to that which deals with the risks of decayed teeth; including, by the way, several instructive cases of pyæmia. The statistics of vaccination were much advanced in a paper by Dr. Josef Körösi, Director of Communal Statistics of Buda-Pesth (to which we hope to make more special reference), and other questions of Public Medicine were made subjects of interesting discussion. Every branch of medicine was well represented—notably the ophthalmic, the gynecological, and the dermatological; so that we venture to forecast that the volumes of the Transaction Reports will have considerable practical importance.

"Notwithstanding that the City of Washington is, like most other cities, liable to suffer an annual desertion by the most influential part of its population during the early autumn, the ninth meeting of the International Medical Congress has been one of the most successful of its kind. We shall not err in saying that as a social undertaking merely, without regard to its professional aspect, this transatlantic

gathering holds a place not second in importance to anything of a similar character that has happened, or is likely soon to happen, on this or that side of the dividing ocean. As an assemblage of medical practitioners and teachers met together with a common purpose of comparing and correcting the results of observation and invention, of devising new plans for future investigation, and of applying new modes of treatment in the art of healing, its significance is equally remarkable. With the single exception of London, no European capital has attracted so many representatives of medicine and surgery since the International movement first originated. Successful in point of numbers, the conference has not been less successful in possessing in more than one particular a thoroughly representative quality. It has been in the widest sense International. Almost every civilized people, besides races which might by courtesy be included in the same category, have contributed towards its membership. The four continents have given of the skill which is available for the treatment of disease in their civil practice, the military and naval services have subscribed each its quota of men and of material for discussion. Again, as regards the subject-matter, it is almost superfluous to point out the illustrative diversities of study by which the sum of medicine can be viewed as through so many windows, and to state that each of these has received its full share of recognition in the working programme of the Congress. Last, but not least, the whole business and pleasure of this meeting have been administered with a cordial good fellowship truly representative of that spirit of hospitality which happily characterizes the American people and annually admits to the privileges of free citizenship strangers out of every country without distinction. President Cleveland and his assessors in the work of Government have been foremost in showing attention to the American practitioners and their guests. Not only have they taken an active part in the extra professional work of the Congress, but it is through their influence that Government buildings have been on several occasions available for social gatherings of the members. We are happy to recall the fact that in so doing they have but revived the precedents afforded by the conduct of other States, but we appreciate no less on that account the warmth of their generous consideration. Nor must we forget to offer an equal tribute of esteem to the American medical press, and to those citizens of Washington who distinguished themselves by affording a similarly handsome hospitality."

Inasmuch as the International Medical Congress of Washington has passed and been freely awarded a high and honorable position with its predecessors by the medical press of other countries, we desire to add only an earnest hope that the medical press of this country will accept the gratifying result, and instead of nursing old prejudices or seeking for imperfections and errors, to which all human beings are liable, will henceforth labor for the unity and advancement of the profession as a whole, and to secure an American representation in the International Medical Congress of 1890, at Berlin, as intelligent and honorable as came from the other side of the Atlantic to Washington in the Congress of 1887.

THE CLAIMS OF MEDICINE.

A year ago one of our contemporaries spoke of the "Students' Numbers" of the English weeklies as "unmitigated nuisances." They can be so regarded only by those who do not earnestly desire a reform in medical teaching. It would be well if every physician, every student, and especially every teacher of medicine in this country, could read these "educational numbers" each year and study in them the English system of medical instruction. In England —or we should say, in the United Kingdom—medical study is practically under the regulation of the Government. In this country the General Government does not concern itself with medical education; and where there is any governmental regulation or supervision it is that of a State.

In the United Kingdom no person is allowed to register as a medical student (and every medical student must be registered) unless he has previously passed, at one or more examinations, in: 1. English language, including grammar and composition. 2. Latin, including grammar and translation. 3. Elements of mathematics. 4. Elementary mechanics of solids and fluids. 5. One of the following optional subjects: Greek, French, German, Italian, or any other modern language, logic, botany, zoology, or elementary chemistry. The commencement of the course of professional study is never recognized as dating earlier than 15 days before the date of registration. The registration of students is under the charge of the "Branch" Registrars, who keep a full record of the students registered. A "Medical Students' Register" is made up and sent each year to the Registrar of the General Medical Council by each Branch Registrar; and this Register is printed and sent to each medical school and hospital.

In regard to professional education and examination the General Medical Council recommends: that the course of medical study after registration should occupy at least 5 years, if the subjects of elementary physics, chemistry, and biology be included in that period, or at least 4 years if a satisfactory examination in these subjects has been passed previous to registration. It is also recommended that at least 4 winter and 3 summer sessions should be passed at a school or schools recognized by the licensing bodies of the United Kingdom. At least 3 professional ex-

aminations are recommended. "In no case should the examination of a candidate in any subject be conducted exclusively by his teachers in that subject in the school in which he has been educated." "Every candidate for the *final* professional examination should be required to give evidence that he has had sufficient opportunities of practical study, with care of patients, medical, surgical and obstetrical, in hospital, dispensary or elsewhere." With regard to this it may be said that proof that a candidate has had opportunities is not proof that he has availed himself of them.

It is said that the profession is more esteemed and looked up to in Great Britain than in this country. Is not one reason of this the fact that the British public knows that the medical man must have spent a certain amount of time, and that a long time, in the study of his profession, while in this country the public knows that men are graduated from many medical schools with insufficient qualifications, and after, in some cases, absurdly short periods of study? In Great Britain a medical title is a guarantee of something definite; in America such is not the case, unless one takes the trouble to find out where the individual was graduated—and this the public will not do. Laymen are, like professional men, critical, and take much more kindly to assertions which are accompanied and supported by reasons. Is there any wonder that the public sometimes questions the vastness of medical science when so many claim to have mastered its principles in two winter sessions? Medical men should not only see to it that members of the profession are properly educated, but that the public is also educated in regard to the real meaning of medicine as an art and a science.

We have thus far only outlined the *professional* mental demands of medicine. There are also other claims of the profession upon its members. A medical man who knows nothing but medicine is very apt to be a one-sided character. Medicine demands at least something of general culture. An educated physician, like any other educated man, should know "something of everything, and everything of something." The knowing everything of something should be the *work*, the vocation; the finding out something of everything should be the amusement, the recreation, the avocation. By regular habits, regular hours (or as regular as possible) and an equable distribution of work and exercise one need not look forward always to summer at the seaside for rest, recreation and amusement. Idleness and inactivity are medicines for sick people, but poisons to healthy bodies and minds.

Medicine has also certain distinct claims upon those who teach by their writings. In this age of much writing and many books, he who would have his writings on professional subjects read must avoid prolixity and verbosity, and state facts and ideas in the shortest and fewest words possible. And this leads us to say that the physician who would have some definite mental recreation, and one that will be of real service to him and others, cannot find a more varied or interesting subject than the study of English composition and style; and with this may be recommended the study of modern languages, the value of which is apparent. Modern medicine demands that the members of the profession keep pace with her advances, and this they cannot do if they are dependent upon translations for a knowledge of what is being done in other lands.

ANTIPYRIN IN ACUTE BRONCHITIS OF CHILDREN.

For some months innumerable articles have appeared in current medical literature discussing the physiological and therapeutic action of antipyrin. That the drug has a wide range of usefulness is an undoubted fact and yet many practitioners who welcomed it gladly at first are now regarding it with some suspicion because of the occasional toxic effects that they observe from it and with some misgivings because of the failure to obtain expected results from its use. There is little doubt but that the drug will obtain a permanent place in therapeutics but we need much more exact information in regard to the indications for its use. It is surprising, as FRIEDLÄNDER points out in a late number of the *Therapeutische Monatshefte*, that among so many articles describing the action of the drug so few have appeared which consider its usefulness in diseases of children. Friedländer has observed with care the indications by which the usefulness of the drug can be gauged in individual cases of acute bronchitis in children. It is just such observations that are needed to enable the physician to use medicines to the best advantage. He says that before using antipyrin he lost many children who were attacked with this disease and its duration was from two to three weeks. Since using it the mortality has been wonderfully diminished and the average duration reduced to one week.

If the cases of bronchitis are classified according to their amenability to antipyrin two groups must be formed, the first embracing those that are most benefited by the drug, and the second those that receive little aid from it. The first group embraces those

who have a temperature of 104° F. (40° C.) and who are well nourished; the second those that have a moderate temperature, 102° F. (39° C.), or less, and who are not well nourished. Both classes are aided by antipyrin treatment, but the former much more so, as is shown by the following statistics. Friedländer says that in a recent severe epidemic of acute bronchitis among children in his neighborhood, he, as well as his fellow physicians, lost 50 per cent. of their patients but since he has used the antipyrin treatment he has lost none of his patients belonging to the first category, and the duration of their illness has averaged not more than a week, and the percentage of loss in the second category is reduced to 10. He suggests that the reason why the drug does not apparently accomplish as much good in weak children is because they are not able to withstand its unpleasant side effects, such as the profuse sweating that it induces. Usually after the administration of a dose the little patients break out in a profuse perspiration, the temperature falls, they sleep for an hour or so and awake with a feeling of well being. The cough is usually looser, and the breathing easier. The dosage recommended is for children under 5 and over 2 years, 12 or 13 grains (0.9 gms). Its effect will continue for from 12 to 15 hours and therefore two doses must be given daily. To a child 2 years old, or less, 7 grains (0.5 gms.) may be given, but only one dose will be needed in the 24 hours. During convalescence one-half of the above mentioned quantities are given at a time. The treatment of acute bronchitis among children by antipyrin as recommended by Friedländer does not exclude the simultaneous use of expectorants.

CONCEPTION AFTER CURETTEMENT.

In Pippingsköld's clinic the operation of curetting the uterus for fungous endometritis was done 60 times during the years 1872 to 1885. HEINRICIUS reports (*Centralblatt für Gynäkologie*, No. 25, 1887) that in 25 of these cases parturition seems to have been the cause of the hæmorrhage, and of these 15 became pregnant after the operation, 5 of the 15 being under 30 years of age, 8 under 40, and only 2 over 40. Of the remainder 1 was a widow 39 years old, 7 were over 40, and the age of 1 patient unknown. Of 35 patients in whose cases parturition played no part in the causation of the disease, 1 died, and information is wanting in regard to 6. Of the remaining 28 only 1 became pregnant after operation. Most of these patients were approaching the climacteric. In 17 cases functional disturbances of the ovaries were the causes of the disease, in the opinion of Heinricius. Of the 52 patients whose histories are known 16, or 30 per cent., became pregnant after curetting. In 2 cases pregnancy began 5 weeks after the operation, and in 1 case in 8 weeks. In his private practice Heinricius has had 1 patient who became pregnant 4 weeks after the operation.

TRANSACTIONS OF THE NINTH INTERNATIONAL MEDICAL CONGRESS.—The Executive Committee while in session in Washington adopted the following resolutions that may be of interest to many of our readers:

"*Resolved*, That all papers read, and the manuscript reports of all discussions, and all illustrations, must be handed in to the Secretary General *before* November 1, 1887, in order to secure a place in the Transactions.

"*Resolved*, That notice be given that the *price* of the Transactions shall be fixed at $10, to those persons desiring to purchase, and that such persons be requested to send their names, with the amount, not later than November 1, to Dr. E. S. F. Arnold, Newport, Rhode Island, the Treasurer."

GLEDITSCHINE, not Stenocarpine, is the proper name of the new local anæsthetic mentioned editorially in THE JOURNAL of September 17. The *Gleditschia triacanthos*, or thorny locust is the tree from which it is obtained.

SOCIETY PROCEEDINGS.

AMERICAN GYNÆCOLOGICAL SOCIETY.

The twelfth annual meeting of the American Gynæcological Society was held in the Hall of the Academy of Medicine, New York, September 13, 14 and 15, 1887.

FIRST DAY—MORNING SESSION.

The Society was called to order by the President, Dr. A. J. C. Skene, of Brooklyn.

An Address of Welcome was delivered by Dr. Fordyce Barker, of New York.

DR. THOMAS ADDIS EMMET, of New York, read a paper entitled

A STUDY OF THE CAUSES AND TREATMENT OF UTERINE DISPLACEMENT.

Version cannot be regarded as the disease. It is but a symptom. If we examine a woman suffering with prolapse, the pulsation of some branch of the cervical artery can be readily detected. When the uterus is raised to the health line a sense of relief is

felt, and if it be held there for a few minutes the pulsation ceases. If, however, the uterus is raised beyond this point, distress is again experienced. Anteversion is certainly not an abnormal position. Retroversion to a marked degree is frequently detected through accident where it has not given rise to the least inconvenience. With reference to the causes, he wished to refer to the influence of pelvic inflammation in inducing displacement. The only fixed point is in front of the neck of the bladder where the sub-pubic ligament binds down the urethra. Any traction on this point leads to irritation and a desire to empty tne bladder. This often results from inflammatory adhesions. The uterus may be retroflexed or anteflexed, but the traction will be upon the urethra. Prolapse is the more usual consequence of pelvic inflammation, resulting from the increased weight due to the obstructed circulation. The degree of displacement is usually in proportion to the extent of the cellulitis. The effect of peritonitis involving Douglass' cul-de-sac is to raise the uterus, while versions always result from pelvic cellulitis. In cases where the inflammation is confined to the utero-sacral ligaments there will be anteversion.

In a case of backward displacement, the uterus is usually comparatively free, so that the displacement can be corrected with the finger. If the organ be held in what is supposed to be its correct position, pulsation will soon be detected in some of the neighboring vessels. If a pessary be introduced under these circumstances it will soon be necessary to remove it. In extreme anteversion, the displacement cannot be corrected by means of any instrument without making traction upon the utero-sacral ligaments, and if this is done inflammation will be the result. In the treatment of cases of displacement the result of inflammation the general practitioner should not resort to pessaries, but should, if treatment is necessary, apply iodine, use cotton and glycerine pads and order hot water injections.

The pelvic circulation presents certain peculiarities. In no other part of the body can so much blood be received in case of disease. The veins are without valves, and their course must be tortuous in order to overcome the force of gravity. The author had observed that if the uterus be drawn down to the floor of the pelvis and held there, the cervix and vaginal tissue become congested as the result of obstruction of the venous circulation. If, however, the traction be increased until complete procidentia is induced, the tissues become blanched as a result of the narrowness of the arteries from the traction.

The whole skill in the use of the pessary consists in constructing it of such size and shape that while it relieves the prolapse it will just dispose of the overstretching. The relief is not dependent entirely upon relief of the version. Its effect is indirect, consisting in the relief of congestion. The speaker had also used cotton saturated with glycerine to lift the uterus. The quantity used was never more than sufficient to correct the prolapse. If a large quantity is employed, it is liable to cause irritation. The profitable range for the use of pessaries is not extensive. If not employed with great caution and judgment, the effects to the patient may be very serious. He believed that nothing can take the place of pessaries when properly fitted and used in the proper class of cases. He thought that their field of usefulness was more limited than is generally supposed. The displacement should not be corrected on its own account nor until the history of the case has been ascertained. No attempt should be made to correct the displacement so long as any evidences of recent inflammation are present. In tracing the histories of a large number of women, no instance of permanent cure has been found from the use of pessaries, in cases where there was reason to believe that previous inflammation had complicated the case.

Dr. Graily Hewitt, of London, said that the snbject of displacements of the uterus had occupied his attention for a considerable period. There seems to be a difference between American and English women with reference to the frequency of cellulitis. He had not found this complication in a large number of cases of uterine displacement. The question of the general causes of displacement is very important. The speaker has attributed the sufferings of the patient to pressure by exudation. He has not alluded to a point which Dr. Hewitt considers important, and that was that the flexure in the uterus interferes with the circulation and causes pressure upon the nerves. To this cause he would attribute a large part of the pain. Simple straightening of the uterus relieves the discomfort. In cases of acute flexion where the sound has been used in the treatment, when the instrument reaches the internal os, this part is found excessively sensitive. By completing the introduction and straightening the uterus, the tenderness disappears within 24 hours and does not return.

There was something more to be said with reference to the use of pessaries when there is no pelvic cellulitis. He agreed that pessaries should not be used if there is acute congestion present, but that there may be cases in which there is contraction and hardness associated with displacement in which pessaries may be very valuable in leading to absorption of the exudation. The pessary must, of course, be fitted carefully and properly applied.

Prof. A. R. Simpson, of Edinburgh, remarked that it had been suggested that there must be a difference between the females of America and of England with reference to pelvic cellulitis. He thought that the difference was more with the mind of the individual who examines these cases. The same woman going to several different observers might get a different opinion from each. He agreed with Dr. Hewitt that the author had not taken a very large view of uterine displacements. He seemed to confine himself to the results of inflammation and to displacements occurring in women who had had children. We also have displacements occurring in women who have been married two or three years and have not conceived. In some of these cases we have inflammation, and this is not to be overlooked. Even after we have done all that we could in the way of relieving the inflammation, it is necessary to put the uterus in proper position to fit it for impregnation.

DR. G. BANTOCK, of London, was unable to agree with the author with reference to the frequency of pelvic inflammation. Experience is teaching us that pelvic inflammation is less common than we have generally supposed. Many of the cases regarded as pelvic cellulitis have been instances where the inflammation was confined to the Fallopian tubes or the peritoneum lining Douglass' cul de sac, and especially the peritoneum covering the Fallopian tubes. He had not seen the utility of paying so much attention to the causes of displacement. In a case of a broken arm we do not inquire particularly as to the exact manner in which the injury was received. So in cases of displacement of the uterus, we need not trouble ourselves with regard to the cause of the trouble. The patient comes to be relieved and we proceed to relieve her as best we can. His experience was that in the majority of cases perfect and permanent relief can be afforded by the proper use of the pessary. The proper adjustment of the instrument is the whole secret. After confinement, where there is retroversion, he recommends, where the uterus is not adherent, replacement by the sound and a pessary properly applied. Where there is much tenderness it is not desirable to at once apply the pessary, but the congestion should first be relieved. Where adhesions have formed the use of the pessary must be set aside altogether.

DR. T. A. EMMET, of New York, said the causes of displacement of the uterus are many, and most of them are well known. His object was to call particular attention to one class of cases which are overlooked and which are complicated with inflammatory troubles, which will not be discovered unless an examination by the rectum is made. This is the reason there is such a diversity of opinion. There is no one who uses pessaries more than he does, and in the majority of cases pessaries should be used and nothing else can be used, but there is a class of cases in which the use of pessaries is improper. As regards the frequency of pelvic inflammation, he believed that it was less common abroad than in America. Our young women go into society earlier and they contract pelvic inflammation as a result of imprudence in dress. He had found the effects of pelvic inflammation more commonly among the unmarried than among the married.

DR. SAMUEL C. BUSEY, of Washington, read a paper on

CYSTOCOLPOCELE COMPLICATING LABOR AND PREGNANCY.

This term is applied to the prolapse of the bladder into the vaginal passage. The prolapse may be partial or complete. It may occur anteriorly or laterally. It is well known that distension of the bladder frequently complicates labor, but the subject of cystocolpocele has not received much attention. It is a rare accident, and when present often overlooked. The author had been able to find six reported cases of cystocolpocele complicating pregnancy. Where the distended bladder can be detected externally, there is no difficulty, but where the prolapse is into the vagina, many of the cases are doubtless regarded as cases of threatened abortion. The speaker reported the following case occurring in his practice:

November 24, 1886, he was called to see a woman in the ninth month of pregnancy. It was thought that labor had commenced. The pains recurred at short intervals. The finger in the vagina at once came in contact with a distended pouch. The os could not be felt and no presenting part could be discovered. It was learned that no urine had been passed since the previous day. With the finger of one hand in the vagina while percussion was made upon the pubes, distinct pulsation was observed. It was then concluded that the case was one of distended bladder prolapsed into the vagina. The patient was then assisted by the nurse to the commode and passed a large quantity of urine. The tumor at once disappeared, the cervix could be reached and labor had not begun. In this case vesical tenesmus was not present.

Cases of cystocolpocele complicating labor, although rare, are more numerous than cases of the same condition complicating pregnancy. The author had found 37 such cases recorded. Mistakes in diagnosis have often been made, and on several occasions the bladder has been punctured under the impression that it was the amniotic sac.

The condition is usually accompanied with pains somewhat like those of labor, but unaccompanied with any progress towards expulsion of the fœtus. In some cases there is complete retention of urine with frequent desire to empty the bladder. More frequently there is a scanty discharge of urine with vesical tenesmus. If the prolapse is partial and the organ empty, a firm hard mass marked with sugar will be found. If the bladder is completely prolapsed and partially or completely filled with urine, there is an absence of vesical intumescence above the pubes and a tumor will be felt in the vagina, completely closing the vaginal canal. The finger can be swept over the lateral and posterior portions of the tumor, but not in front. Where the prolapse is anterior, labor cannot be completed until the urine is removed. The only certain sign of this affection is the discharge of urine through the urethra and the subsidence of the swelling.

DR. WILLIAM GOODELL, of Philadelphia, had met with two cases of this condition, one a few days before labor and the other during labor. In the first case he found a body as large as the child's head and as hard. There was severe vesical tenesmus. He could not pass the finger behind the tumor and there was no evidence of an os uteri. Further examination showed the swelling to be due to the distended bladder. A catheter was readily introduced and relieved the swelling. There was no return of the trouble. The other example of this condition occurred in a case of antero-posterior contraction of the pelvis. The pain was very great, but the cause of the difficulty was soon recognized. It was impossible to introduce either the soft or the metallic catheter. He then put on the forceps, and raised the head so that the catheter could be passed in. The labor was then completed with the forceps.

AFTERNOON SESSION.

DR. WM. M. POLK, of New York, read a paper entitled

IS SALPINGITIS TO BE TREATED BY EXTIRPATION OF THE TUBES AND OVARIES IN ALL CASES?

By salpingitis the speaker meant that disorder whose most marked clinical symptom is found in the presence of the periuterine masses so commonly met with in palpating the pelvic contents. The most common result of this condition is displacement of the tubes. The author had already made a report on 100 cases of salpingitis. In 50 of these cases the abdomen was opened and in 50 no section was made, but in these a comparison of the results of careful examination left no doubt that the whole series of 100 cases represented the same disease. The majority of cases of salpingitis recover. Even where a small quantity of pus is present this may be encapsuled by lymph and do no harm. Some of the cases remain as confirmed invalids, while a few die. Outside of the puerperal condition the death-rate is low, and including antiseptic midwifery the death-rate is still low. The main symptom observed was dysmenorrhœa.

An examination of the cases coming under the author's observation led him to believe that the chief cause of the symptoms in many cases was the presence of adhesions. He had operated, removing the adhesions, but allowing the tubes and ovaries to remain, on the ground that although pregnancy might not occur, yet as their removal was unnecessary, mutilation could be avoided and one of the objections to the operation removed. The question whether or not the adhesions will re-form must be answered by experience. The author reported eight cases operated on in this way. In one case there was shortened utero-sacral ligaments, the posterior face of the uterus touching the rectum. The ligament was stretched, a drainage-tube inserted and the patient did well. She had suffered for a long time from dysmenorrhœa and pain during coition, and other evidences of so-called cellulitis or chronic salpingitis. In the second case the uterus was retroverted and bound down by adhesions. These were torn, the tubes and ovaries loosened and the uterus held forward by Alexander's operation, the object being to displace the uterus from the old position and prevent the formation of new adhesions. Within proper limits the extirpation of the uterus and ovaries is a valuable operation. It is, however, desirable to confine it within its narrowest limits, and where it is possible to avoid mutilation, to do so.

DR. A. MARTIN, of Berlin, said that progress can only be made in this important matter by distinguishing between the different forms of disease of these organs. In only a small number of cases is the tube the seat of a neoplasm. He had found only one case of carcinoma of the tube. The most frequent disease of the tubes is catarrhal inflammation, extending from the uterus. We frequently see it following the puerperal state. It has often been supposed that the salpingitis was of gonorrhœal origin, but only in a few instances have the gonococci been found in the tubes. In most cases, the disease of the tubes is a benign affection; a catarrh which increases the size of the tube and may give rise to hæmorrhage, particularly at the time of menstruation, and occasionally to pyo-salpinx. Frequently, early occlusion of the tube is the result.

Only a small number of the 250 cases coming under his observation had required operation. As in most cases the disease is a simple catarrh, we must first institute treatment adapted to the simple nature of the affection. If we do not succeed in relieving the symptoms and reducing the size of the tube, we are to operate. He had done eighteen operations for disease of the tube, but very seldom did the tube give him the occasion for the operation. Generally it was the spread of the disease to the other pelvic organs, particularly the ovaries. In many cases there was abscess of the ovaries. This severe complication is not observed with sufficient frequency as to warrant operations in all cases of salpingitis. He had lost about 12 per cent. He never performs the operation except where there is a distinct tumor. In nearly all of these cases there was severe peritonitis. In the majority of cases we can cure these patients by general treatment.

DR. T. A. EMMET, of New York, held much the same views as Dr. Martin. A large number of these cases can be cured by careful general treatment, and it is our duty to operate in no case until the woman has had an opportunity to see whether or not she can get well without operation. When the disease of the tube is unquestionably of gonorrhœal origin, the operation may be resorted to at once. He was satisfied that two-thirds or more of the cases operated on to day, will not be operated on five years from this time.

DR. WILLIAM GOODELL, of Philadelphia, agreed in a large part with what Dr. Martin had said. His rule is to try in the majority of cases the effect of rest treatment, with general and local medication. It seemed to him that the author of the paper gives us an operation more dangerous than the removal of the ovaries. What objection is there after the abdomen is opened to the removal of the ovaries and tubes? This is not a mutilation, they are unable to perform their function. Rather than resort to a second operation, such as Alexander's, he favored the removal of the tubes and ovaries. In cases of malposition of the uterus, associated with disease of the tubes and ovaries, he had frequently righted the uterus by introducing a pessary at the time the ovaries and tubes have been removed and keeping it in during the process of recovery.

DR. G. BANTOCK, of London, remarked that the question which has been proposed may be answered in the negative. Ordinary cases of salpingitis due to catarrh can be cured by rest and constitutional treatment. When it comes to pyo-salpinx and hæmato-salpinx the conditions are different. A well marked case of pyo-salpinx, whether due to catarrh or to gonorrhœal infection, will require operative treatment. He had, however, seen tubes which evidently had contained a large quantity of pus, but which when examined contained only a small quan-

tity of cheesy matter. It is rare to have death from the rupture of a pyo-salpinx. In hæmato-salpinx the condition is far more serious than in pyo-salpinx.

About one year ago, he had under treatment a case of fibroid tumor of the uterus. The patient suffered a great deal of pain and he was induced to operate. When the brim of the pelvis was reached the adhesions were so numerous that he could not proceed. He thefore determined to remove the ovaries and bring about the menopause. The left ovary was removed without difficulty, but the right ovary could not be found. Fluid was detected in the right side and an incision showed that there was a fibroid tumor which had undergone cystic degeneration. The edges of the cavity were stitched to the abdominal wall, a large opening being left to facilitate drainage. In three months the patient was quite well. She subsequently married and a short time ago was delivered of a living child. It is therefore clear that when the mischief arises from the outside of the tube, sterility does not necessarily result. When, however, the inflammation begins inside, sterility will probably be induced. With reference to the procedure suggested of loosening adhesions and allowing the tubes and ovaries to remain, he was inclined to think that that is not the correct treatment. If the tubes and ovaries are so diseased as to require the removal of adhesions, he considers it proper to remove the tubes and ovaries also. The effect of applying ligatures on each side of the uterus is to lift the organ into a more satisfactory position than can be done by Alexanders's operation.

DR. R. S. SUTTON, of Pittsburg, agreed in the view of salpingitis that all cases should not be operated on, but if pus exists in the Fallopian tube it is our duty to evacuate that pus, just as it is our duty to evacuate a collection of pus in the arm. No one has a right to allow a woman to go around with a pus sac ready to burst into the peritoneum, when he can remove it. The condition of life of the patient must be considered. A poor woman may require operation, while a rich one might be able to get along without operative measures.

DR. GILL WYLIE, of New York, said that in one thousand of his earlier cases of pelvic peritonitis and cellulitis, he operated about once in every ten cases. In later years the proportion has increased. Of his last sixty cases 60 per cent. were for pyosalpinx, and all these cases have recovered. He should not be willing to try the operation suggested by the author.

DR. WM. M. POLK, of New York, remarked that the question which he had considered was in regard to mutilation. A woman has a right to her ovaries if they do her no harm. Dr. Bantock's case shows that the presence of adhesions is not a bar to pregnancy. He thought that the removal of the tubes is a most important operation, but we must avoid extirpation of the tubes and ovaries unnecessarily.

DR. PAUL F. MUNDÉ, of New York, read a paper on

DRAINAGE AFTER LAPAROTOMY.

While drainage is an accepted procedure in general surgery, its position in abdominal surgery is not yet settled. The author then quoted the opinions of various operators, showing the great diversity of views. If antiseptics can prevent the decomposition of fluids left in the abdominal cavity the use of the tube can be dispensed with. So long as there is any doubt as to this, so long, at least theoretically, will drainage be called for. Some of the disadvantages connected with the use of the tube are, that the abdominal wound can not be completely closed, the danger of septic contamination through the tube, the liability to ventral hernia is increased, and there may occur serious reflex gastric irritation. Whatever good is done by the drainage tube is probably accomplished within the first 24 hours. As soon as the fluid which escapes is serous or serou-sanguinolent the tube may be removed. It has recently been recommended that in cases where it is found impossible to remove the whole tumor and a large cavity is left, a sac of iodoform gauze be made and packed into every crevice of the cavity. This is then filled with narrow strips of iodoform gauze. This the author had employed with satisfaction. At the end of ten days the dressing was perfectly odorless.

It was thought that when drainage seemed necessary the tube might be omitted, and the removal of fluids accomplished by an antiseptic gauze strip passed through the vaginal roof into the vagina. This permits of the perfect closure of the abdominal incision.

DR. A. MARTIN, of Berlin, does not employ drainage after ovariotomy, for the absorbing power of the peritoneum is so great that it can dispose of a considerable quantity of fluid. He uses drainage in only a few conditions. He uses it in amputation of the uterus through its neck, in vaginal hysterectomy, and where there are large surfaces of a sloughing character and large cavities left in the broad ligaments, as in extra-uterine pregnancy, in large fibroid tumors which have been enucleated, and in large cystic tumors where all the surfaces can not be brought in contact. In these cases he uses the drainage-tube passed through Douglass' cul-de-sac into the vagina.

DR. G. BANTOCK, of London, said that so confident was he of the value of drainage that he uses it on the slightest provocation. He uses it where there has been abundant adhesions and where it has been found impossible to completely dry the peritoneal cavity. He uses it where the tumor has burst and it is impossible to remove all the contents. In these cases he uses also large quantities of clean warm water. He has given up everything in the form of antiseptics. Since then his results have correspondingly improved. In his last 104 ovariotomies he had lost three, and in the last 78 he had not lost one. While he values the use of the tube, he did not think it was required in the majority of cases of ovariotomy. He employs the ordinary straight drainage-tube introduced to the bottom of the wound. It should be emptied every two or three hours. This prevents any absorption of the effused fluids and the patient recovers without any elevation of temperature or any alteration in the pulse. When the fluid

removed is nothing but plain serum, the tube may be taken away, but if it is removed before all blood has disappeared great risk is run.

Dr. Gill Wylie remarked that one of the advantages of the use of the tube has not been referred to, and that is that it gives us early information as to the occurrence of hæmorrhage.

Dr. Wm. Goodell, of Philadelphia, said that he was not a believer in the drainage-tube, although he used it occasionally. In three or four cases he had colloid cysts rupture three or four weeks before operation, and when the abdomen has been opened all the organs have been found covered with the colloid material. These cases recovered without the use of the drainage-tube. This was before the time of washing out of the abdomen. In a recent case of the same kind he used a drainage-tube, and not more than three ounces of fluid escaped. He agreed with reference to the great value of the tube as showing the presence of hæmorrhage. In one case a fæcal fistula occurred, and this he attributed to the presence of the tube.

(*To be concluded.*)

SUFFOLK DISTRICT MEDICAL SOCIETY.

Section for Clinical Medicine, Pathology and Hygiene.

Stated Meeting, May 11, 1887.

Dr. F. I. Knight, Chairman.

Albert N. Blodgett, M.D., Secretary.

(*Concluded from page 476.*)

Dr. F. I. Knight read a paper on

THE CONTAGIOUSNESS OF TUBERCULAR DISEASE OF THE LUNGS, WITH A REPORT OF ONE CASE.

In July, 1885, a young lady of 19, came to my office with a history of cough of nine months duration. I found signs of phthisis in one lung. Her father was a very strong man; her mother had died of some nervous trouble after child-birth. There had been ten children, five of whom died in infancy, none of them with any brain or lung disease. There had been also six half-brothers and sisters, one of whom had died in infancy. Of the uncles and aunts on both sides, only one uncle had died of phthisis. The patient gradually declined, and died April 15, 1887. She was accompanied in her visits to my office by an older sister, 23 years of age, who had given up everything to attend to her. This sister, while not robust-looking appeared well, and said that she had always been so. She occupied the same room and bed with her sister. This I protested against, and advised her to go out regularly every day for walks in the fresh air. The last record made of their visits to me was in the latter part of October, when the phthisical patient became too sick to come to me, and went under the care of her family physician in a neighboring city; she died, as I said, on the 15th of April. On the 19th of April the sister came into my office with the following history. She had continued to attend closely upon the invalid all winter, and had disregarded all my advice. She had even slept with her sister up to within five weeks of her death. She was with her night and day. During the latter part of her sister's life her breath was so offensive that she could eat almost nothing, and only kept herself up by the free use of stimulants. She stated that she had had a little dry, hacking cough for a month. She breathed rapidly, but said there was no dyspnœa. On examination her pulse was found to be 140. Temperature 104°. On examination of the chest, subcrepitant râles were heard in both upper lobes, front and back, and the diagnosis of acute pulmonary tuberculosis was made. Examinations, April 26 and May 3 confirmed the diagnosis. On the 21st of May, she came to my office so weak that she had to be assisted from the carriage to the house. She reported hæmoptysis of several months two weeks before. She was so weak that I did not examine her chest. Pulse, 160; temperature, 103.4°. I did not see her again, and she died June 17, 1886, about two months after I first examined her, and three months after the beginning of the dry cough.

Who can fail to believe that the disease and death of this patient was caused by attendance upon her sister? Hardly any one will deny this. Admitting it, would she have succumbed to acute *pulmonary tuberculosis*, if she attended upon a sister ill with some other disease? As she had no such hereditary tendency I do not think so. How often do we see patients worn out with much longer attendance upon the sick, and yet do not become tuberculous! And how often do we see strong women without the slightest herditary tendency succumb to attendance upon tuberculous patients.

It is useless to allege in this connection, that ordinary attendance upon the sick in consumptive hospitals does not affect the attendants. I admit this fact, but the attendance is not so prolonged, nor so close as in families. Let any one who has doubt about the clinical evidence bearing upon this point read the little brochure of Webb. The fact is that tuberculosis is so common with us, that we have almost ceased looking for the immediate cause in any case, especially if relationship gives us a chance to attach the blame to heredity. I believe, however, that there are hundreds who have by inheritance that peculiarity of pulmonary soil which favors the development of the tubercular disease. Who would not shun it unless they were brought into contact with those already affected? Whether all cases require such a transmission of germs we do not know.

In what manner is it probable that the disease is communicated? It has been claimed that bacilli have been found in the breath, but it is, perhaps, more probable that the communication in most cases is by dried sputum, which becomes diffused in the atmosphere. We have abundant proof that tuberculosis can be readily communicated to animals little liable to it, for example dogs, by causing them to inhale for an hour or two a day an atomized solution of the sputa of tuberculous patients. (See

the experiments of Tappeiner and others in substantiation of this statement.)

So then, I say that the appearance of tuberculosis of the lungs in countries where it was previously unknown, with the ingress of people from countries where it was common, the marked increase in the disease in the neighborhood of health-stations resorted to by the tuberculous, the personal history of the development of cases in our midst, and experimental work with the sputa, all point strongly to the probable communication of the disease under favorable conditions, and make it not only incumbent upon us, in case of pulmonary tuberculosis in a family, to establish precautions against communication of the disease, but makes us criminally negligent in failing to do so.

What precautions shall we take? These pertain (1) to the patient; (2) to the quarters he occupies; and (3) to the exposed attendant.

The patient should be made careful in the disposal of his sputa, either to deposit them in a cup in which some germicide has been placed, or if the patient is feeble and obliged to use cloths let them be destroyed before any drying occurs. It would hardly seem to be necessary to warn respectable patients not to spit about them carelessly, yet I have seen with respectable people the most utter indifference in this regard.

For disinfection of the spit-cups, Dr. Ernst informs me that a 5 per cent. solution of carbolic acid is the best. Corrosive sublimate does not answer, as it coagulates mucin, and does not reach the bacilli at all.

In regard to the room: we should secure change of air by every known device, and as long as possible by a daily removal of the patient from his room, for the purpose of thorough ventilation. Clothing and bed-linen should be frequently changed. The absolute value of antiseptic sprays for the room in such cases we know not, and the use of those which are offensive in themselves should not be recommended. But such as are pleasant to the patient and attendant would be of service at least in counteracting the disagreeable odor which attends the last stages of pulmonary disease.

In regard to the exposed persons, let it be said that from the moment tubercular disease is discovered, another person should not occupy the same bed, not only for the sake of the exposed person, but also that of the patient, who will rest much more comfortably alone. Sleeping in the same room should also be forbidden, as we seem to be more susceptible to all infectious diseases during sleep. The attendant should have daily exercise in the open air, and if a relative, an occasional complete change, if possible. In case of any failure in health, this should be insisted upon, and although the physician cannot always prevent self sacrifice on the part of friends, he can often modify it. At any rate, he should not feel that relief of his patient was his only duty, but that his duty extended to the surroundings of his patient, and required that these should be arranged with due regard to the protection of relatives and friends.

If there is any decided hereditary tendency to the disease, relatives should if possible, be prevented from any attendance upon the sick, and put at once upon proper hygiene.

DR. STUART: When I was at the Carney Hospital I saw a case of a young lady; she was the step-daughter of a consumptive who had just died; the question as to whether her mother died of phthisis could not be brought out. The patient did not seem to know. She was one of a family of eight brothers and sisters, all well, and she alone had evidence of phthisis. According to this patients statement, while her step-mother was sick for fourteen months she had hardly been out of the house. Dr. Devine, in speaking of the case, said he knew of a draw-tender who had buried two wives of phthisis; the draw-tender had the disease of course, himself, and the only conclusion which he could draw from this case was that the draw-tender was out in the open air almost all the time, while his successive wives were shut up in the house, and thus the course of the disease was made quicker for them.

DR. BLODGETT said that he could not refrain from calling attention to the fact in relation to tuberculosis, which is not sufficiently considered in the treatment of cases of this disease. He was happy to observe that the chairman had laid stress upon the same point, which is the eminently infectious nature of tubercular disease. There is no doubt that many cases of tuberculosis are communicated from one person to another, but the cases are not followed with that care which is everywhere thought desirable, even imperative, in relation to other infectious and contagious diseases. The time has probably not yet arrived when we can test this class of diseases in the manner which would be applicable to other communicable diseases. We are too much under the domain of public opinion to venture the rational and only real method of treatment which is directed to the peculiar character of the malady in question. We cannot properly utilize the knowledge which we already possess in relation to tuberculosis.

In some foreign hospitals, patients with tuberculosis are treated in the same manner as are those with other dangerous disorders; that is, the sufferer from tuberculosis is segregated from other patients, and is isolated in a ward devoted to infectious diseases, where he is subjected to a rigid seclusion from the other sick to whom the disease might be communicated. Much the same care and seclusion is exercised in relation to tuberculosis as is done with scarlet fever, measles, etc. Dr. Blodgett said that he had recently had a case under his own care in which the germicide treatment was adopted as one of the principal measures of relief, and in which there was an entire disappearance of all symptoms of disease. The patient is the son of a clergyman, and is about 40 years old. His father was for many years a sufferer from chronic pulmonary disease, and died after attacks of pulmonary hæmorrhage, presumably of tuberculosis. The mother is still living, but has long been in feeble health. The patient was never a strong man, but maintained his ordinary standard of health until five years ago, when he was the sub-

ject of fistula of the anus, for which he was under treatment by surgical measures for a year. Since that time he has been somewhat feeble, and eighteen months ago he began to fail perceptibly. Twelve months ago, he was under treatment for hoarseness, which advanced to a degree which rendered speaking above a whisper almost impossible. At this time he came under the care of Dr. Blodgett who found distinct ulceration of the larynx, with induration and impaired mobility of the vocal structures; and by microscopic examination the bacillus of tuberculosis was readily demonstrable. The patient was at once placed under treatment by means of tonics, removal to the country, the use of antiseptic lotions and inhalations, principally of mercuric bichloride, the employment of which was rendered tolerable by means of antecedent applications of cocaine. He passed some months on the sunny side of a hill selected with some care in New Hampshire, and late in the autumn returned to Boston. He gave up his previous residence, and removed to the highest part of Newton, into a new house, on sandy and dry soil, where he has since resided. He has steadily improved, his weight has increased from 122 pounds to 140 pounds. He has never been so heavy as at present. He is gaining strength, the voice has returned, and there is every reason for believing that the disease has entirely disappeared.

It is true that this was probably not a case of *contagion*, but it is illustrative of the way in which a disease which is contagious should be looked upon. It would, in all probability, have been perfectly possible for this patient's wife or child to have acquired the disease, by contagion. He had constant attacks of bronchial or pulmonary irritability, frequent catarrhs, and recurrent periods of hoarseness and threatened pulmonary tuberculosis. His system furnished a soil which was peculiarly adapted for the reception of such a disease.

Dr. Harold Williams remarked that when a student he had been taught by Dr. Knight that phthisis pulmonalis was communicated by the sick to those in attendance upon them under certain conditions, and that in his practice he had never had occasion to change this view. He had not come prepared to cite cases in proof of this doctrine, but could say that he had never doubted its truth, and that he had each year many cases which confirmed it both at the Boston Dispensary and elsewhere. The two principal arguments against the view of contagion were: *first*, that phthisis was the commonest disease in our community, one-fifth of our people dying of it, and that cases of its supposed contagion were cases of coincidence. This argument Dr. Williams thought could be answered by saying that the reason of its frequency was because of its contagiousness, and the absence of sufficient precaution in protecting the well against the sick. The second argument of the immunity of the attendants of phthisical patients in hospitals had been answered by Dr. Knight. Dr. Williams not only believed phthisis to be contagious, but he believed the bacillus to be the element of contagion, and this had suggested to him that the well-known germicide properties of arsenic might account for the efficacy of this drug in phthisis, and that he was conducting some experiments to test this theory. Since reading Jaccoud's book, in which the administration of arsenic is highly recommended, Dr. Williams had employed it in several cases with good results, especially in one girl with phthisis of three months' standing, in which case its administration had been followed by complete recovery. Dr. Williams questioned if the good effects so strongly insisted upon by Jaccoud might not be due to the germicide properties of the drug, rather than to its action as a tonic, and as diminishing blood pressure and calming nervous irritability as claimed by Jaccoud.

FOREIGN CORRESPONDENCE

LETTER FROM LONDON.

(FROM OUR OWN CORRESPONDENT.)

Ulexine—Papaw—Surgery for Nurses—Miner's Nystagmus—Funnel-end Œsophageal Tubes—Prescription for Hay Fever and Summer Catarrh—Turpentine in Headache.

With a degree of unconventional boldness which some will characterize as bordering upon audacity Mr. E. Harry Fenwick, the well-known specialist in diseases of the urinary system, treated the students of St. Peter's Hospital at a recent lecture, to a discourse of a very different kind to the ordinary run of "hospital lectures." The lecture in question included a succinct description of the more important properties of cocaine, kava-kava, strophanthus, salix nigra, pinus sylvestris, lycopodium, etc., which Mr. Fenwick has found exhibited by the respective drugs in his own actual practice. The lecturer commenced by referring to the changes which had been introduced into our therapeutical practice of late years, and pointed out how much more had been done on the Continent than in England, although here we were in some respects well situated for obtaining raw material to work with, and also for the means of experimental study. Mr. Harry Fenwick concluded with a few remarks upon ulexine extracted by Gerard from the tops of the common furze or gorse, (ulex Europæns,) describing it as a strong respiratory poison. Crucial experiments upon frogs shows that ulexine powerfully excites the urinary secretion, but the effect is transient. Thus where the normal flow was three drops per minute but after two minutes this quickly retrograded to its original amount. Somewhat similar effects were noted in the human subject, and it had been given with advantage in some instances, but in cases of long standing stricture of the urethra, doses of one-tenth grain had induced severe vomiting, with much pain, blackening of the tongue and other inconveniences, hence ulexine needed to be administered with caution. With regard to papaw (carica papaya), the lecturer had successfully applied it for the softening and removing of diphtheritic membranes at the London Hospital, and he had found it of marvelous power in dislodging and bringing away renal stone, the pain being relieved in a very short time. Papaaine was also used by him with advan-

tage in cases of dyspepsia, and in India it was employed as a remedy for tape worm, as it not only killed them more certainly than the oil of male fern but quickly dislodged and partly dissolved them.

A small work by Mr. Joseph Bell, dedicated to Florence Nightingale, and called "Notes on Surgery for Nurses," is quickly running through its first edition. The author, who has for twelve years delivered lectures to the nursing staff of the Royal Infirmary at Edinburg, now publishes the pith of them in a concise form, which should be of service to those for whose benefit the lectures are intended. The subjects dealt with include nearly all of those diseases in which the nurse plays an important part, and her duties in each case are fully explained. In speaking of the necessity of cleanliness in all cases of ulceration the writer remarks: "Ventilation of wards, cleanliness of floors, walls and bed linen, have helped, and it is now nearly a quarter of a century since I have seen a case of hospital gangrene."

Dr. Charles Taylor of the Nottingham Eye Infirmary, speaking of miner's nystagmus, says that he does not consider it to be caused by, or accompanied with any lesion of the central nervous system, but in pure myopathy, analogous to that rare condition of the muscles of articulation known as auctioneers' spasm, or to writers', pianists' and telegraphists' cramp, or to similar affection of the gastrocenemic muscles occasionally observed in ballet dancers, who run on tiptoe until they are attacked by cramp, spasm and uncontrollable motions whenever they attempt to dance at all. The extraordinary oscillation of the eyeball noticed in the subjects of nystagmus he considers to be due to the close connection which exists between the ciliary muscle and the internal rectus, may be developed in any muscles engaged in the effort at accommodation and is caused solely by the overtaxing of these organs. The miner, surrounded by black objects, makes day after day, for years, a great and sustained effort to see in an imperfect light (especially imperfect when safety-lamps are used). The muscles engaged in this continued strain are overtaxed, and in course of time give way, and at last, when called upon, become agitated and fluttered, escape from control of the will, and just as in the analogous case cited above perform irregular motions, so that, as miners express it "the lights dance," whenever they look at them.

Mr. Charters Symonds' short funnel-ended tubes for wearing in the œsophagus in cases of cancerous growth, stricture, etc., have recently been used and found most successful in some of the London hospitals. These are a great improvement on the old long tubes hanging out of the mouth, as they allow of the food being taken in the natural way, instead of the unpleasant mode of feeding by means of the funnel.

Sufferers from hay fever and summer catarrh should make a note of the following recipe, given by Mr. Martindale, of New Cavendish street, for smelling salts calculated to relieve these affections. Absolute phenol 24 grains, carbonate of ammonia 16 grains, strong solution of ammonia 44 grains, oil of lavender 1½ grains, camphor 3 grains, pure sawdust 9 grains. The author of the prescription speaks highly of the results he has obtained amongst his clients who have used it during the past summer.

Turpentine in doses of 20 or 30 minims, it is said, will not only remove headache, but produce in a wonderful manner a soothing influence.

G. O. M.

DOMESTIC CORRESPONDENCE

STATEMENT OF THE SECRETARY-GENERAL IN RELATION TO THE MATTER OF ITALIAN DELEGATES AT THE INTERNATIONAL MEDICAL CONGRESS.

On the 9th of November, 1886, I addressed a letter to Professor Mariano Semmola, of the University of Naples, requesting him to be present at the Congress, notifying him of his election as Vice-President, and asking him to deliver an address at the general session. In response to this, Professor Semmola in accepting the invitation, replied under date of the 26th of November, 1886, as follows:

NAPLES, November 26, 1886.

Monsieur et très-honoré Confrère:

Je m'empresse de vous répondre par le retour du courier à votre aimable lettre du 9 courant. Je vous remercie de l'honneur que vous me faites en m'appelant à une conférence-meeting et j'accepte bien volontiers cette charge. Le subjet que je traiterai dans cette conférence générale est le suivant: La bactériologie et la clinique thérapeutique.

Je vous prie en même temps de vouloir m'inscrire dans la Section de Medecine pour les travaux suivants:

1. Nouvelles preuves expérimentales et cliniques de l'origine dyscrosique de la Maladie de Bright.
2. De l'ataxie paralytique du coeur d'origine bolboire.
3. Contributions à la pathologie du sympathique.

S'il le faudra j'aurai l'honneur d'envoyer au Secrétariat général le résumé ou les conclusions principales de ces travaux. J'attends à ce propos des renseignements que vous pourriez avoir la bonté de me donner. Veuillez agréer l'assurance de ma haute considération. Trés-devoué,

[Signed] M. SEMMOLA.

He was therefore inscribed on the Register as a member of the Congress, and when the programme was issued, duly reported thereon as one of the gentlemen named to deliver a general address.

On the 6th of June, following, the Baron Fava, the Italian Minister to Washington, addressed the following letter to Dr. Dunglison, the Secretary of the Executive Committee:

ITALIAN LEGATION, WASHINGTON, June 6th, 1887.

Dear Sir:—In reply to your esteemed favor of the 31st August last, I beg to inform you that my government has appointed as its official delegates to attend the Ninth International Medical Congress, to be held in Washington in September next, the following gentlemen:

Comm. Professor Mariano Semmola, Senator of the Kingdom of Italy, and Dr. Francesco Durante, Professor of the surgical clinic at the University of Rome.

Believe me dear sir, with the best regards,

Very respectfully yours,

[Signed] BARON FAVA.
Italian Minister.

As the letter was addressed to him, Dr. Dunglison did not send the letter to me, but retained it until two days before the meeting of the Congress.

On Saturday before the meeting, the question of preparing the preliminary programme was discussed

by the President of the Congress, the Chairman of the Executive Committee, and myself, and the programme was then prepared. As there were two delegates from Italy it was concluded that, as Professor Semmola was to have the general address—considered by us all as one of the honors of the Congress—that the other delegate should be selected to deliver the address on behalf of Italy, in response to the speech of welcome of the Honorable T. F. Bayard, Secretary of State of the United States. I verbally communicated this desire to Professor Durante on Wednesday evening, to which he assented as follows:

RIGGS HOUSE, August 31, 1887.

DR. HAMILTON, S.G.U.S.M.H.S.

Dear Sir:—In response to your courteous invitation that I as the Representative of the Italian Government should answer the address of the Secretary of State of the U. S. have the honor to say that I accept with pleasure. Respectfully,

[Signed,] FRANCESCO DURANTE

Professor Semmola had not up to this time arrived in Washington. The morning papers of the following date contained a notice that Professor Durante had been so requested, and Professor Semmola, arriving in Washington on Sunday, he, with his Secretary called on me, in my office at the Riggs House, and stated that he, being a Senator of the Kingdom of Italy, felt it was his privilege to reply in an address of semi-official character, and his Secretary stated to me that, if the demand were not complied with, Professor Semmola would withdraw from the Congress, and decline to deliver his address. I immediately communicated with President Davis, and others of the Executive Committee, and it was decided that, as his claim seemed to be sustained by the wording of the letter of Baron Fava, that the programme could not be interfered with by declining to yield to Professor Semmola, and as it would materially interfere with the work of the Congress, and greatly embarrass the proceedings, I sought Professor Durante to explain to him that his invitation had been premature, and that the necessity of the case required that the Committee withdraw the verbal invitation tendered him to respond on behalf of Italy. I was unable to find him on Sunday, or Sunday evening. In the meantime Professor Semmola was informed that the Committee acceded to his request, and the following letter from him was received:

WASHINGTON, September 5, 1887.

Monsieur le Secrétaire-Général:

Je viens vous remercier pour la justice que vous m'avez rendue et je garderai comme un des plus chers souvenirs de ma vie publique l'aimable mot que vous avez bien voulu m'addresser.

Je vous prie, Monsieur le Général, de vouloir faire inscrire mon nom parmi les members du Congrès, aussi bien que les noms de mes deux Secretaries Mr. Robert O. Wickersham et Monsieur le Marquis Lanza.

Je vous prie d'agréer mes sinceres expressions de dévoument.

[Signed,] PROF. M. SEMMOLA.

Professor Durante, unfortunately, was not communicated with till the next morning, when he appeared in my office. I stated to him, and his Secretary, Dr. Tricomi, in substance, as follows:

Professor Francesco Durante, etc.

My Dear Sir:—When I asked you on yesterday to make for us a short reply to the address of welcome by our Hon. Mr. Bayard, Secretary of State, I was unaware at that time that any Senator from Italy was present. It seems that Professor Semmola of your great country is also a Senator, and as such he desires to respond on behalf of the country. It appears that the precedents of other Congresses lie in this direction. Thus at the International Anthropological Congress, at Lisbon, Senators Gozzadini and Mantegazza were called upon in a similar capacity. Therefore we are under the necessity of extending this Senatorial privilege to Professor Semmola.

They withdrew from the room, and I received the following letter:

RIGGS HOUSE, September 5, 1887.

General Secretary of the Medical Congress.

Sir:—Having been invited by the Secretary-General of the Medical Congress, Surgeon-General Hamilton, to answer in the name of my country the address of the Secretary of State, I accepted with pleasure and so informed by letter the Secretary-General. My surprise was therefore great and painful when this morning while inquiring about the order of exercises at the opening of the Congress the same Surgeon-General Hamilton informed me that he had requested Dr. Semmola, of Naples, to make the answer. This change was done without my knowledge and consent and was therefore an insult.

I am the Representative of the Italian Government inasmuch as I was so delegated by the Minister of Public Instructions, the only Minister that has authority to make such an appointment. Professor Semmola's appointment is not from the Government but from one Minister, that of the Interior, as an expression of personal regard. The plea that Dr. Semmola is a Senator of the Kingdom should not be considered in this matter, as this is a medical and not a political Congress. In view of the foregoing and of the personal affront, I hereby withdraw from the Medical Congress aforesaid. Respectfully,

[Signed,] PROF. FRANSCESCO DURANTE.

This letter was simultaneously published in the daily press of the city.

I was then called upon by Dr. T. S. Verdi, of this city, who inquired into the circumstances, to whom I related the foregoing, as nearly as possible. He then retired, and in the meantime returned saying he had seen Professor Durante and thought the matter could be explained satisfactorily if I would sign a letter, which he produced, and which appears on the first page of *Ill Progresso Italo-Americano*, New York, September, 10, 1887. I did not sign the memorandum which he presented to me as appears in this paper, but re-wrote it. The words as translated in *The Progresso*, are as follows: "Grandamente mi dolgo che ho ceduto alla domanda del Prof. Semmola e spero che Ella, come Vice-Presidente del Congresso, vorrà continuare ad aiutarci col suo consiglio e conla sua esperienza, rimendo con noi," were not used by me, but I said I greatly regret the *circumstances*, etc., meaning thereby that I regretted any controversy should have arisen, as the Committee only desired to promote harmony in the Congress and between the delegates. He then demanded of me, through Professor Verdi, that I should say to him exactly what had been said by Professor Semmola that induced the Committee to change the invitation to Professor Durante, which I did in a letter which is probably correctly translated in the paper of the name and date as above given.

No disrespect was intended to either of the delegates to the Congress at any stage of the proceedings, and, in regard to the address of Professor Semmola, the Committee were abundantly satisfied and delighted with both the subject matter of the address

and the manner in which it was delivered, and in yielding to Professor Semmola's request to deliver the address of welcome to the Secretary of State they simply desired to carry out the proprieties of the occasion, and to compliment Italy. If, however, any injustice has been done any individual, or ill feeling has resulted, they are sincerely sorry, and can only regret the circumstance.

J. B. HAMILTON, M.D.,
Sec.-Gen'l International Medical Congress.

LETTER FROM NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Annual Meeting of New York State Medical Association—Discussions on the Management of Compound Dislocations of the Ankle-Joint—The Origin, Nature, Complications, Sequelæ and Treatment of Typhoid Fever, etc.—Opening of the College of Physicians and Surgeons of New York, in the New Building.

The last week in September was a very busy and pleasant one in the medical world of New York. The fourth annual meeting of the State Association was held on the 27th, 28th and 29th, at the Hotel Brunswick, Madison Square; which proved a much more comfortable and attractive place for the purpose than the somewhat lugubrious and dreary Lyric Hall, on Sixth Avenue, where the Association met last year. The attendance was good, and the proceedings characterized by much interest. The distinctive feature of devoting the greater part of the afternoon sessions to set discussions on topics of general medical and surgical importance, which has proved so useful and attractive in the past, was retained with admirable results the present session; and the subject of the first day's discussion was the management of compound dislocations of the ankle-joint, which was opened by the distinguished surgeon, Dr. Edward M. Moore, of Rochester, the last President of the Association, and participated in by Drs. Joseph D. Bryant and Frederic S. Dennis, of this city; U. C. Lynde, of Buffalo; Frederick Hyde, of the University of Syracuse; and Charles W. Brown, of Elmira. The second day's discussion was on the origin, nature, complications, sequelæ and treatment of typhoid fever; which was opened by the accomplished and erudite Dr. Alfred L. Carroll, of Staten Island, recently Secretary of the State Board of Health, and participated in by Professor Edward G. Janeway, of Bellevue; Hermann M. Biggs, of the Carnegie Laboratory; E. D. Ferguson, Secretary of the Association; Charles A. Leale, ex-President of the New York County Medical Association, and others. The special question, "Is there a disease of the lower animals transmissible to man as typhoid fever?" was discussed by D. E. Salmon, D.V.S., of Washington, D. C.; R. S. Huidekoper, of Philadelphia; and James Law, F.R.V.S., of Tompkins County, New York. The third and last day's discussion, on placenta prævia, was opened by Dr. George Tucker Harrison, for many years one of the well-known surgeons of the Woman's Hospital, and participated in by Dr. Isaac E. Taylor, President of the Association; Professors T. Gaillard Thomas and William T. Lusk; Drs. John Shrady, of New York, Darwin Colvin, of Wayne County, William H. Robb, of Montgomery County, and others. On the evening of September 28 demonstrations in pathology were given at the Carnegie Laboratory, under the direction of Professor Janeway, and on that of the 29th the annual banquet was held.

On the 29th of September the new buildings of the College of Physicians and Surgeons were inaugurated with appropriate ceremonies. They are situated on West Fifty-ninth street, just opposite the Roosevelt Hospital, and are, of course, models of convenience and equipped with all the most approved appliances for the successful study of both the science and the art of medicine. The college proper consists of a southern wing, measuring 140 by 43 feet, along Fifty-ninth street; a northern wing, 76 by 43 feet, along Sixtieth Street; and a middle portion, 96 by 55 feet, connecting the other two. The southern wing contains the administrative department, with conversation, reading, working, and "bone" rooms. On the second and third floors are the museum, professors' recitation and demonstration rooms, the physiological laboratories, and the Swift Physiological Cabinet. The top floor, lighted entirely from above, is devoted wholly to work upon the cadaver. The main featurre is the public dissecting-room, lighted in the evening by the electric light, and containing 36 tables, at which 180 students can dissect at once. About this room are grouped smaller apartments for private dissection, for the teaching of operative surgery upon the cadaver, and for the preparation of material to illustrate the lectures on anatomy and surgery. The northern portion of the building is nearly all devoted to laboratories of various kinds, and in the middle building are the two large lecture-rooms of the College, one of which will accommodate 450 students, and the other, the amphitheatre, more than 450 students. The remaining space is taken up with work-rooms in the various departments.

The Vanderbilt Clinic, at Sixtieth street and Tenth avenue, is connected with the College building by a covered passage-way. It was built, and the site provided, by the sons of the late Mr. Vanderbilt, as a memorial of their father, and in it is afforded a fully equipped dispensary service for the sick poor. It contains also a theatre for clinical lectures and small rooms for instruction and physical examinations. The Sloane Maternity Hospital is at Fifty-ninth street and Tenth avenue, and provides ample facilities for the practical study of obstetrics. It is a lying-in hospital, with 30 beds, given by Wm. D. Sloane, whose wife, a daughter of Wm. H. Vanderbilt, has made its beds free in perpetuity.

The inauguration exercises took place in one of the large lecture-rooms, and when they were about to commence the President, Board of Trustees, and Faculty marched down the aisle and took seats on the platform. The Vanderbilt family was represented by Messrs. Cornelius and George Vanderbilt, and among the distinguished men present, not belonging to the medical profession, were President Barnard, of Columbia College; President Gilman, of

the Johns Hopkins University; Professor Dwight, of the Columbia Law School; Judge Gilbert M. Speir; and the Hon. Chauncey M. Depew. After prayer by the Rev. Dr. Weston, Chaplain of the College, the President, Dr. John C. Dalton, delivered an address mainly devoted to the past history of the College of Physicians and Surgeons, which was founded in 1807, with Nicholas Romeyn as its first President. The first lectures were given in a building on what is now Park Place, and it was not until fifty years after it had been started that the institution became the medical department of Columbia College.

The inaugural address was to have been delivered by Joseph H. Choate, Esq., of the Board of Trustees; but, owing to illness in his family, he was unable to be present, and his place was taken by Prof. Wm. H. Draper, who also presented a large bust of Wm. H. Vanderbilt, the gift of the Trustees and Faculty, and busts of the late Drs. Hosack and Mitchell, and Dr. John C. Dalton, the present President of the College.

In the evening a festival alumni dinner in honor of the inauguration was held at Delmonico's, at which were present about 200 medical men. On this occasion Dr. C. R. Agnew, who is one of the Board of Trustees, presided, and speeches were made by Chauncey M. Depew, Cornelius Vanderbilt, the Rev. Dr. John Hall, Dr. William Pepper, Provost of the University of Pennsylvania, and others.

The community was recently somewhat startled by the arrival at this port of a steamship from Naples with 8 cases of Asiatic cholera on board, and on which 8 other persons had died of the disease during the voyage. The proper measures were at once taken by the quarantine authorities, however, and there is little likelihood of the cholera's gaining a foothold in the city. The 8 patients were transported to the hospital on Swinburne Island, where 2 of them subsequently died; and the remaining passengers were taken to Hoffman Island, where they will be retained until all danger of their communicating the disease is over. Since their removal to the island two or three other cases have developed among them. P. B. P.

THE FAUCIAL METHOD OF INTRODUCING THE EUSTACHIAN CATHETER.

Dear Sir:—Catheterization of the Eustachian tube, which occupies so prominent a place in diagnosis and treatment of the diseases of the ear, when attempted in the ordinary way, is not always as satisfactory as the simplicity of the maneuver would indicate.

Recently, in the case of an adult who sought relief for distressing tinnitus with deafness, the deflection of the septum was such that the route by the floor of the nostril proved quite painful, and finally unsuccessful, from the fact that she felt the column of air arrested before it reached the middle ear. The use of the Politzer bag not furnishing better results, it occurred to me that with the aid of the rhiniscopic mirror and giving the catheter a sufficient curve, I could succeed by the direction of the fauces.

The method proved satisfactory and is not painful. I found it also available on account of excessive sensibility in cases of rhinitis with deafness. It is not so ready a method as that by the nose in patients that present themselves for the first time, but it would seem to have a useful place.

In looking over the available literature, I found that Dr. Buck alludes to Dr. Pomeroy's faucial Eustachian Catheter, and disapproves of its employment without giving reasons. Dr. Buck's work, Wood's Library Series, bears the date of 1880, a date, prior, I think, to the present extended employment of cocaine, the local use of which obviates reflex spasm and undue sensibility, conditions that would otherwise be in the way of its employment.

CHARLES ENFIELD, M.D.

Jefferson, Ia., Oct. 4, 1887.

PUBIC DISLOCATION OF THIGH, With Fracture of Rim of Acetabulum.

Sir:—June 9, 1887, J. D.'s horse while in full speed fell on bridge, dragging J. D. 20 feet with right hip and leg under the horse. I found outward dislocation of patella and pubic dislocation of thigh, accomplished reduction with distinct crepitus. While waiting for subsidence of effects of chloroform the limb became dislocated by muscular contraction into thyroid foraman; replaced again; after remaining in place few minutes became displaced again. This was repeated several times. Finally retained it in place by pelvic bandage and compresses anterior and posterior to great trochanter. Bandage removed July 1. On July 10, through severe muscular spasm, thigh became dislocated again. Dr. C. S. W. and myself succeeded in accomplishing the reduction with same result as in the former reduction, finally retaining it in place with the bandage and compresses. July 11, excessive vomiting and depression set in, with paralysis of left arm and right foot, with paralysis of sensation along entire extent of external popliteal nerve. Under use of arsenic and electricity arm and leg recovered, foot remains permanently paralyzed. Passive motion of hip is gradually restoring its function. Length of limbs equal.

A. S. KINNAMAN.

Homerville, O.

NECROLOGY.

WILLIAM A. BYRD, M.D.

The Adams County Medical Society places this minute upon its records in memory of Dr. William A. Byrd deceased August 14, 1887. Dr. Byrd was born in Both Co., Va., in 1843. Graduating at the Missouri Medical College in February, 1867, his professional career covered a period of just twenty years, eighteen of which he was a member of this Society. He was a student of untiring industry and large capacity for endurance, and gave himself unsparingly and with real enthusiasm to the work of

his profession. With a natural aptitude for surgery he early devoted himself especially to that branch, and became noted for his boldness, operative skill and fertility of resource.

The publication of improved methods and devices adopted by him in operations upon the colon, and on the use of wire in ununited fractures, but especially the former, attracted wide attention, gained him recognition in the American Medical Association, and gave him honorable standing in the International Medical Congress at its meeting in London. In the year 1885–6 he was president of the Illinois State Medical Society. Dr. Byrd became a member of the Adams County Medical Society in May, 1869; was elected president in 1874 and again in 1877. The period of his membership in this society corresponds to its busiest and most fruitful years, and we recognize the fact that for this fruitful activity much is due, not only to the large part personally borne by Dr. Byrd in its professional work, but to the stimulating influence of his example upon his fellows. C. W. R.

JONATHAN LEONARD, M.D.

Jonathan Leonard, M.D., was born in Sandwich, Mass., January 7, 1805, and died at his home in Sandwich January 29, 1882. His father, Dr. Jonathan Leonard, was a physician of long and successful practice, and the son early became interested in the science of medicine. He graduated from the Harvard Medical School in 1828, and soon after commenced practice with his father. He removed to Boston in 1836. Notwithstanding the advantages of the city, a life in the country was more congenial to his tastes, a love of nature being a strong element of his character, and in a few years he returned to Sandwich for the remainder of his life-work. Dr. Leonard became a member of the Massachusetts Medical Society in 1831. A close student, and thoroughly devoted to his profession, he soon became widely known as a skilful physician and a wise counselor in all difficult cases. His good judgment, delicacy and gentlemanly bearing, made him invaluable in his profession and gave him the confidence of the community. He joined the American Medical Association in 1849. He was thoroughly good in his life, pure in his motives, refined in his tastes, tender sympathies, and charitable in his judgment. He was deeply interested in all that pertained to the welfare of his native town, particularly its educational interests. In his religious views he was broad and liberal, was always a generous contributor to that branch of the Christian Church whose teachings were in harmony with his own thought. His last illness was extremely painful, but retaining his consciousness to the last, he bore his sufferings with fortitude and implicit trust in God. He was married twice, December 31, 1834, to Alice C. Babcock, daughter of Samuel H. Babcock, of Boston, and March 31, 1878, to Mrs. Mary T. Jarvis, daughter of C. C. P. Waterman, of Sandwich, who, with a daughter by the first marriage and a son by the second, resides upon the old homestead in Sandwich.

MISCELLANEOUS.

MEDICAL SOCIETY OF VIRGINIA.—The eighteenth annual session of this Society will be held in Richmond on October 18, 19, and 20. There will be a general discussion on "Choice of Anæsthetics."

NEW BOOKS RECEIVED.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, Eighty-Ninth Annual Session, held at Baltimore, Md., April, 1887.

The Principles of Antiseptic Methods Applied to Obstetric Practice. By Dr. Paul Bar. Translated by H. D. Fry, M.D. Philadelphia: P. Blakiston, Son & Co.

Pulmonary Consumption, its Etiology, Pathology and Treatment, with an Analysis of 1,000 Cases. By C. J. B. Williams and Charles T. Williams. Second Edition, enlarged and rewritten by Dr. C. T. Williams, with Colored Plates. Philadelphia: P. Blakiston, Son & Co.

Handbook of Gynæcological Operations. By A. H. G. Doran. Philadelphia: P. Blakiston, Son & Co.

Surgery, Its Theory and Practice. By William J. Walsham. Philadelphia: P. Blakiston, Son & Co.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM OCTOBER 1, 1887, TO OCTOBER 7, 1887.

Capt. E. C. Carter, Asst. Surgeon, leave of absence further extended fifteen days. S. O. 231, A. G. O., October 4, 1887.

First Lieut. J. M. Cabell, Asst. Surgeon, relieved from further duty in connection with the competition of "Team of Distinguished Marksmen," Bellevue Rifle Range, to take effect October 1, and will return to his station, Ft. Omaha, Neb. S. O. 95, Dept. Platte, September 27, 1887.

First Lieut. J. M. Cabell, Asst. Surgeon, will be relieved from duty at Ft. Omaha, Neb.; assigned to temporary duty with Battalion Sixth Infantry, in the field.

First Lieut. W. C. Borden, Asst. Surgeon, will be relieved by officer commanding troops, upon arrival of Asst. Surgeon Cabell, and will return to his station at Ft. Douglas, Utah. S. O. 98, Dept. Platte, October 1, 1887.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY, DURING THE WEEK ENDING OCTOBER 8, 1887.

Asst. Surgeon Wm. Martin, detached from hospital, Norfolk, and granted sixty days' leave.

Medical Inspector N. L. Bates, detached from Naval Dispensary, and to Examining and Retiring Board.

Surgeon A. F. Price, ordered to the Naval Dispensary, Washington, D. C.

Surgeon J. R. Waggener, ordered to the receiving ship "Minnesota."

Surgeon Paul Fitzsimmons, detached from "Minnesota" and to "Morion." October 15, 1887.

Asst. Surgeon Louis W. Atlee, detached from receiving ship "Vermont," and to the "Morion." Oct. 15, 1887.

P. A. Surgeon W. H. Rush, detached from coast survey str. "Blake," and to the Navy Yard, New York.

Asst. Surgeon T. A. Berryhill, detached from "Minnesota" and to the "Blake."

Surgeon M. C. Drennan, detached from Naval Academy, and wait orders.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE FOR THE TWO WEEKS ENDING OCTOBER 8, 1887.

P. A. Surgeon Fairfax Irwin, granted leave of absence for twenty-five days. October 5, 1887.

P. A. Surgeon John Guiteras, granted leave of absence for seven days. September 28, 1887.

Asst. Surgeon Seaton Norman, upon expiration of leave of absence to rejoin station, New York. October 4, 1887.